Internet Technology
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Lecture No #14
HTML -Part – II

We continue with our discussion on html. Now if you recall in our earlier class we had talked about some of the features of html like, what is the structure, overall structure of html document. We talked about the tags and their attributes which are necessary to define the structure of the document. We talked about the head and the body which are which are included within the overall begin html and end html tags. We looked at some of the formatting commands and tags as well. Now continuing with our discussion today. First we shall be looking at how we can specify and construct lists using html tags and attributes.

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So the first thing we would be talking about today is html lists.

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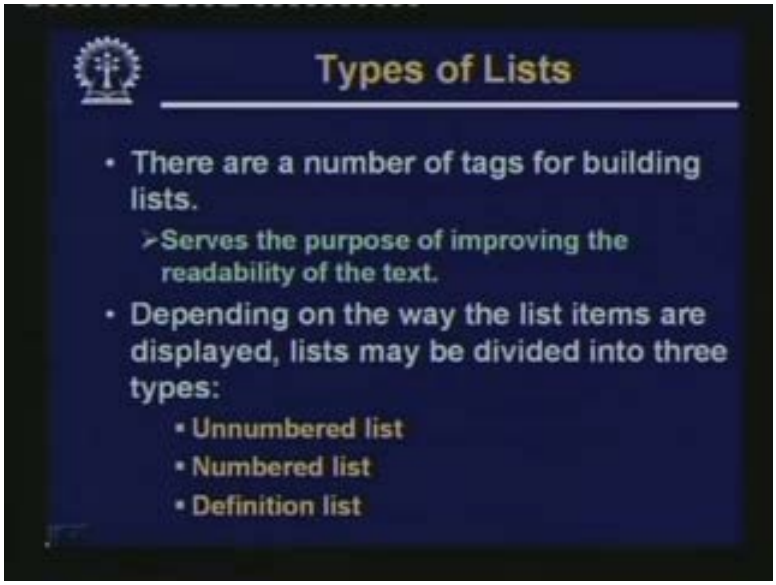

Now talking about lists, there are a number of tags which are available which can be used for building these lists. Now we typically use lists in a document to increase the readability of the material that we are presenting. Say, instead of writing something as a continuous text, if you can separate it out as some bulleted list or numbered list or some terms and their descriptions in a suitable formatted way. It becomes much easier for the reader to apprehend quickly what this document is all about. So the visual impact of the document plays a very big factor in understanding or comprehending the content.

So the lists are one of the ways in which you can have some structure visible in the document which can be understood quiet easily. So the primary purpose is as it is mentioned to improve the readability of the text that you are formatting. Now there are several different kinds of lists which are supported and these lists will vary depending on the way how the so called list items are displayed. So you can have a distinction between unnumbered list, numbered list and definition list. These are broadly the three different kinds of lists that are supported by html. Now we shall be looking at these different kinds of lists one by one and how we can create list using them.

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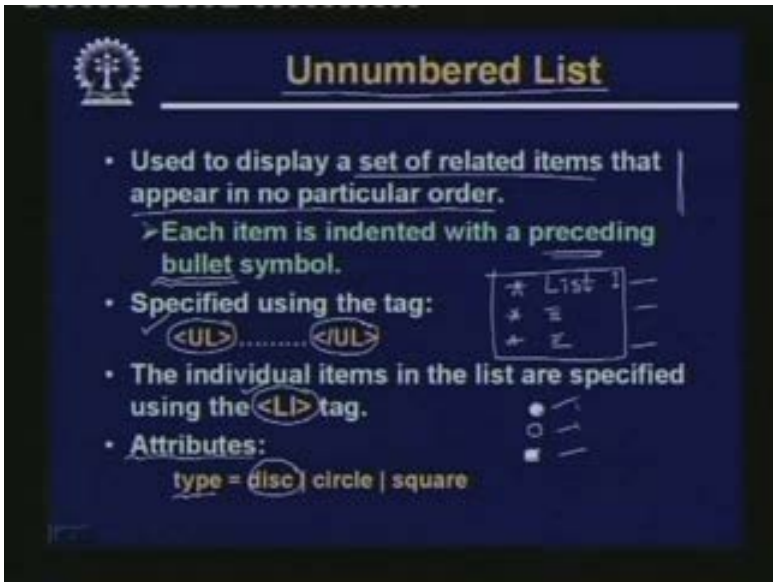

First we talk about unnumbered list. Now as the name implies an unnumbered list does not contain any number before the list items. These kinds of lists are important or are used to show or display a set of related items that do not appear in any particular order. This is important. Because if the items do appear in a particular order. Then it is must more natural to number them as 1, 2, 3, 4, rather than just use a bullet in the beginning and show them. Well when I say they are displayed in no particular order, means even if you interchange their order it does not make much difference in terms of the contents.

So if your matter is like that then unnumbered list is the most natural way of displaying and the list is displayed by some kind of a bulleted symbol preceding the list items. There what I mean to say is that you can have a special bullet symbol followed by your actual list say list one. Then you can have another bullet symbol followed by something else, another bullet symbol followed by something else. So it is in this way you can have a so called bulleted list and this kind of bulleted list are called unnumbered list. Because we are not putting any number 1, 2, 3, 4, like that and these kind of unnumbered lists are specified by the UL tag; begin UL and end UL.

UL stands for unnumbered list. And within this bounding UL begin and end tags. The individual list items they are specified by using the stand alone tags LI. This LI will specify the list items. Now there is an attribute which you can use here. Now this attribute can be used along with UL as well as along with LI. If you use this attribute with UL it will be applied to all the elements of the list. If you use it with LI, this will be applicable only to that particular element of the list. Now this we shall be explaining with the help of some examples later.

But let us first try to understand what this attribute actually means, the name of this attribute is type and in case of unnumbered list. This type can be disc, circle or square. Disc is the default if you do not specify anything disc will be the default style. This actually tells you what kind of bullet symbol will be appearing before the list items. If it is a disc, it is just a solid circle. If it is a circle it means it is a hollow circle with no filling. Square means it will be a small square which will be filled up. So the difference between disc circle and square are these in terms of the way the bullet items are displayed at the beginning of the list.

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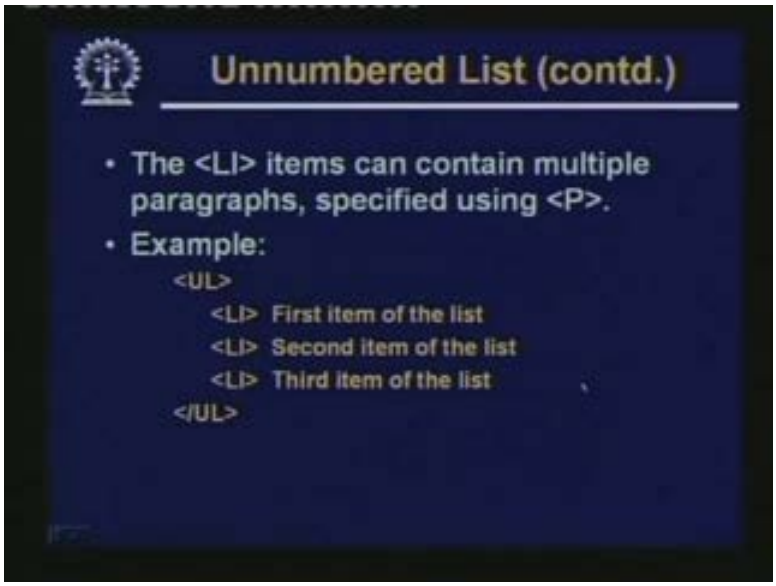

And this LI item; this as I mentioned this can specify the individual elements of a list for instance look at this example. There is an example out here where do you see that the beginning of the list is marked with the UL tag. There is a corresponding end of the list end UL and inside it there are three list items. Each of them is preceded with the LI tag. This LI tag indicates the beginning of the list items. Now in this example each list item is just a single line each. Now in general each list item can be longer in fact it contain multiple paragraphs as well. So if there are multiple paragraphs it will be suitably intended.

Now if there are multiple paragraphs they will be suitable formatting also for instance the first item will be displayed with a bullet. There can be several lines; there can be a

paragraph break after that the next bullet can start so it will be starting here. So they will all be very suitably indented. So indentation will be maintained in a proper way. So if you want your list item can consist of a single line or a single sentence. It can be several sentences it can be multiple paragraphs also the only thing is that the indentation would be maintained across all the list items within a defined list which are bounded by begin UL and end UL.

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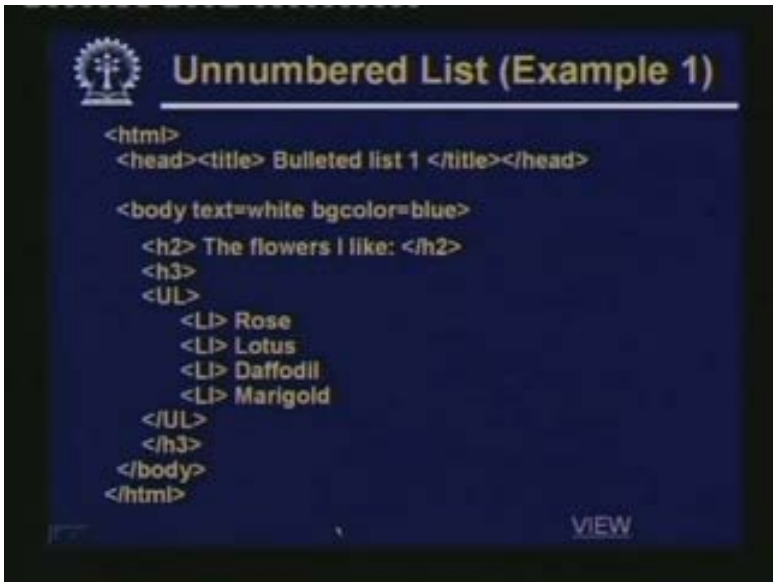

Let us look at a specific example now. In this example you see that that within the bounding begin html and end html there is of course the head section. For that we have specified a title of this bulleted list one, body text color and background color specified and here you have the actual list. This h2 the flowers I like h end h2 this is more like a header. This should appear on top and this list item follows after that we have given this h3 begin and end just in order to make this list items appear bigger. This h3 you may or may not give. Now within the list item just we have listed the names of some flowers rose, lotus, daffodil, and marigold. Now here the way we have given we have not specified any particular type attribute. So as I mentioned by default this style disc will be used as the bullet symbol. That means a circle with the solid in side that means a solid circle darkened circle that will be used as the bullet symbol. So let us see if this html code is displayed on the browser how it will look like.

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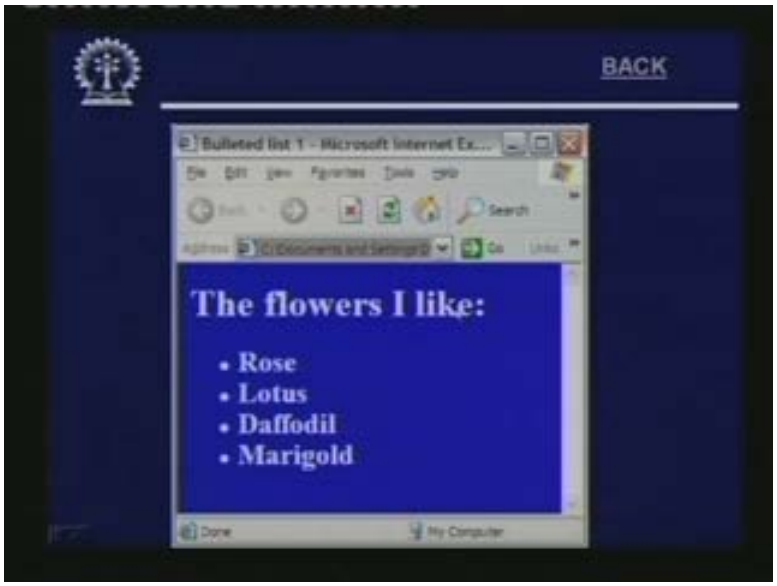

It will look like this. The flowers I like, this will be the header. And you see the items are displayed in a suitable. Indented form with this symbol circle solid circle or disc this appearing before each of them right. This is how the list items will get displayed. Now let us see how by using the tag type we can change the shape or the nature of the bullet.

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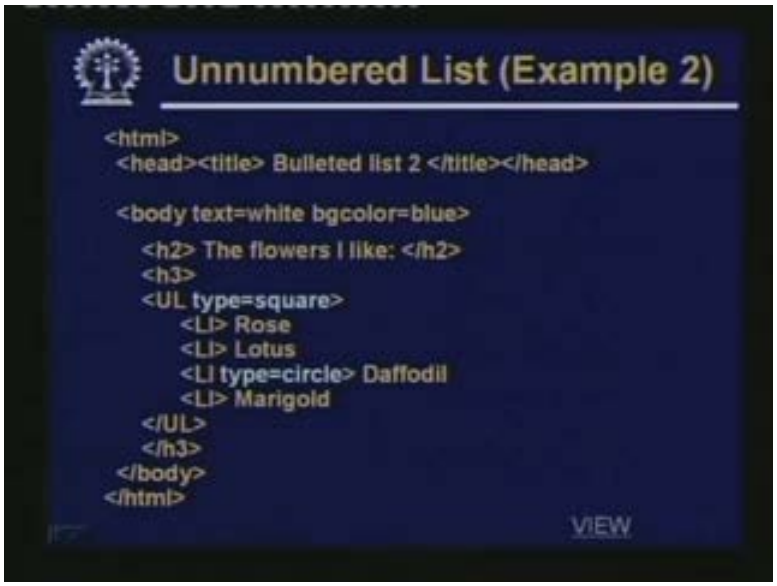

In the next example we do this. The text is almost the same only we have made two changes. First in the unordered list tag, UL tag, we have specified type equal to square. This specifies that the default bullet type which was disc; will now be square which means that by default the list items will be coming with a solid square used as the bullet.

This will be the default. But just for the sake of illustration in one of the list items the third one in fact we have explicitly specified a type, type equal to circle.

So if you want you can specify such a type for each individual list items. Here we have specified a type for the third item a circle. So if this particular file is displayed what will happen, let us try to anticipate. Since we had given type is equal to square for the overall list. So the bullet type square would be used by default. In addition the third item of the list has been marked with a type circle. So the third one only will be appearing with a circled bullet the other's one will be r squares. Now let us see how this will appear.

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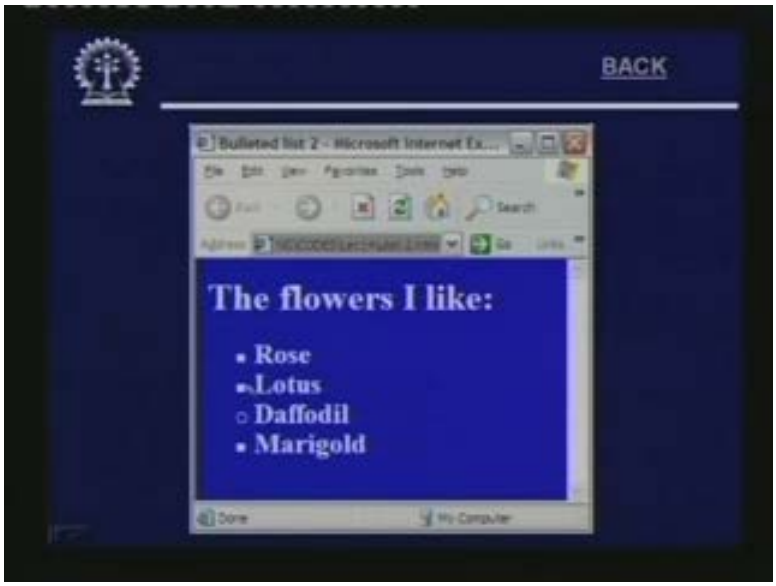

This is how it will be appearing on the screen. You see that first second and the third they are filled squares. The third one it is a hollow circle right. So this is how we can change the shape of the bullets that appear in an unnumbered list.

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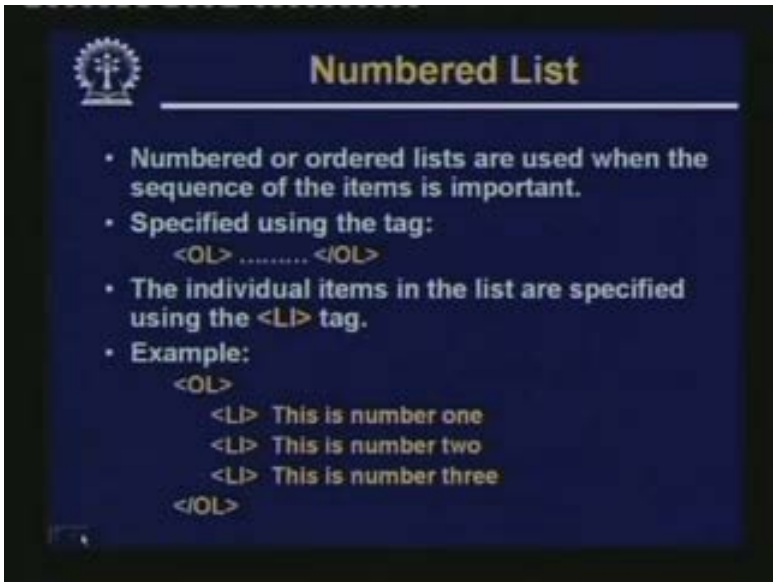

Well next let us come to the so called numbered list. Numbered list as the name implies it is a list with numbers. Numbers means the list items, when you display they will appearing with some numbers 1, 2, 3 and so on. And the list items will be displayed after that. That is why they are called numbered lists. Now just try to understand when do we use some numbers in a list? When some kind of ordering we are assuming to be present? Because, if there are no orders we can as well use a bulleted list. So when you are using a numbered list, it means that the sequence of the items is important sometimes, we do not follow this convention.

But this convention should be followed; whenever there is a list with numbers it means that the orders of those items are important in some sense. Now these kind of numbered list are also called ordered list and they are specified by the tags OL; begin OL, end OL and exactly like the unnumbered lists the individual list items can be specified by the LI tag. So a simple example of an ordered list or a numbered list will be like this. It will be encapsulated within ordered list OL and end OL inside that you can have as many list items as you want. So the way you specify an ordered list is very similar to an unordered list only that instead of UL you use the OL tag.

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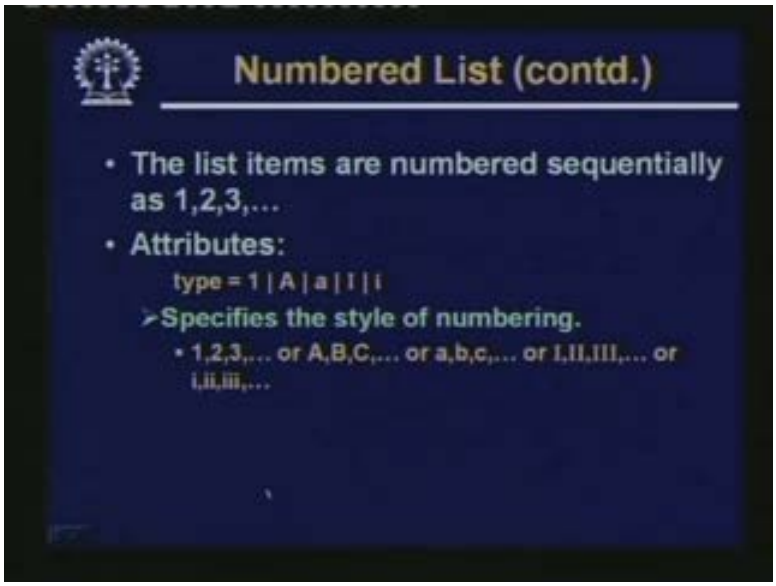

And as I mentioned the list item will be numbered sequentially as 1, 2, 3. But in unnumbered list we are able to specify the style of the bullet using the type attribute. Here also we can specify the style of the numbering by a similar attribute type. Now let us see what is meant by changing the style of the numbering. Well here also the name of the attribute is type and type can assume one of this five values either 1 or capital A or small a or capital I or small i. This means that see if we give type equal to one this means that we ant to follow the numbering scheme 1, 2, 3 like this. If it is capital A, it means that we want to follow the numbering scheme A, B, C, capital. Small a means we want to follow small a, small b, small c. If it is capital, it means we are trying to follow the Roman numeral system. So the numbers will be displayed in roman 1, 2, 3, 4 and small i means this is also roman, but in lower case. So depending on the style, I prefer I can choose this one of these 5 types. So whenever you are trying to create an ordered list or a numbered list you can also specify the type.

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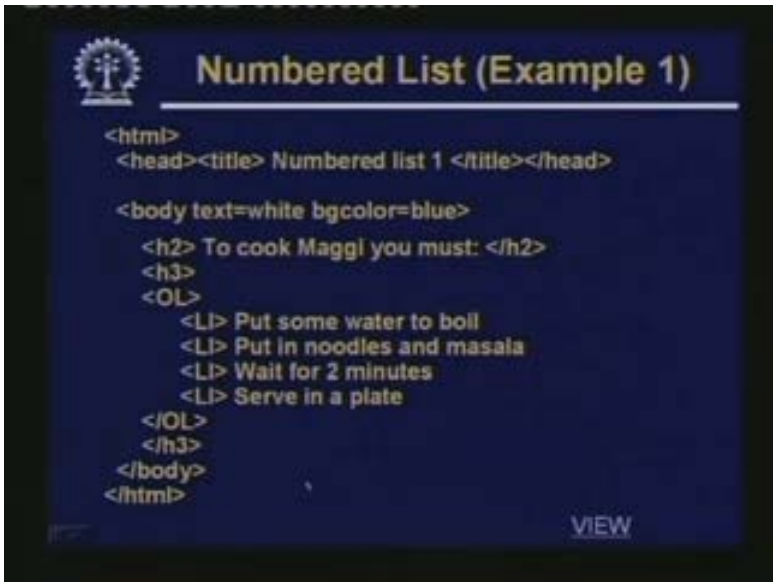

Now let us take an example here. This is an example illustrating a numbered list. Well, the standard head title body these are all there. This is the heading which we have made it bigger by this h2 tag. This as usual using h3 we have made the list appear bigger. Now ordered list I had said that this something where order is important. So here I have taken an example where order is important. The heading shows what the example is, to cook maggi you must put some water to boil, put in noodles and masala, wait for two minutes, serve in a plate. Suppose I want view this on a browser one thing I did not mention that although we have different styles available to us by default the style which is used is the numbered 1, 2, 3, 4 that style is followed. Now let us see if we use or if we view this particular html file on the browser. How this will look like? This will look like this.

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The h2 heading will come on top. To cook maggi you must and within that these are four items list items and the numbering scheme we have used is capital 1, capital 2, capital 3 and capital 4. So this example shows how you can use the default numbering scheme. Now we make some small changes to this example.

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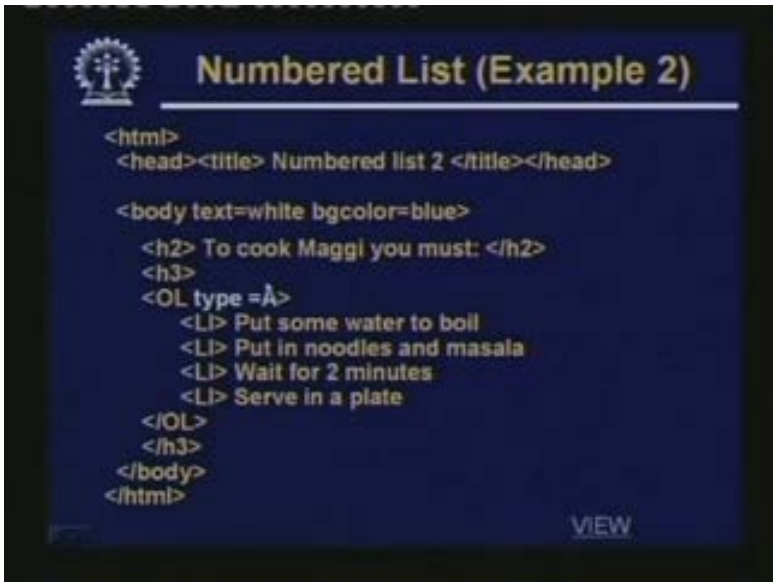

First change you make is that instead of the default style we just make it type equal to A. This is the first thing we do. Type equal to A means this same example, now I want that instead of displaying the list item as 1, 2, 3, 4, I want to display it as a, b, c, d. So let us

see how this will get displayed same example with this attribute type equal to include in the begin OL command tag.

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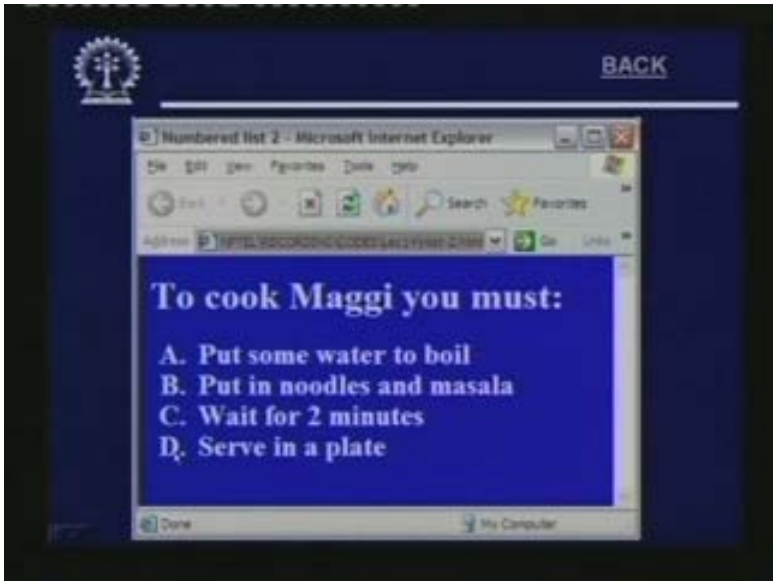

If you view this will be the same kind of display. But instead of 1, 2, 3, 4 we are getting A, B, C, D, in the beginning. This is the only difference you are getting right. Now let us put some more changes.

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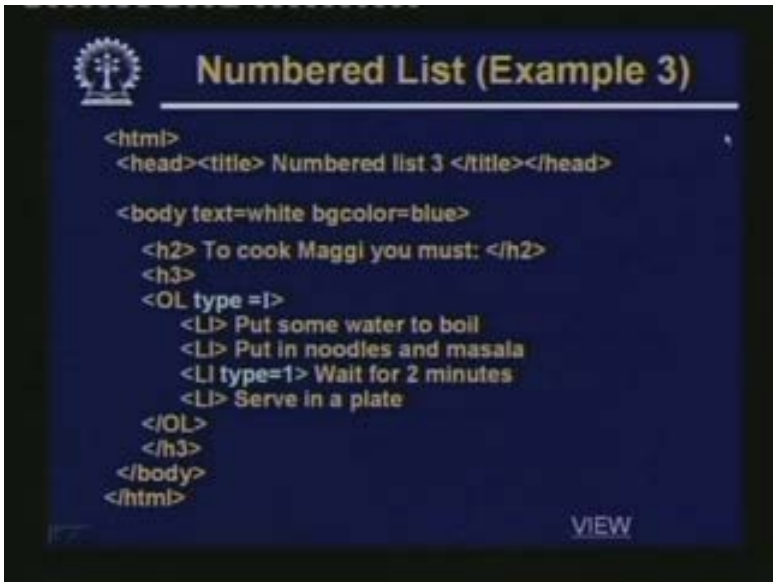

This is again the same example with one change we have given type equal to capital I. In this OL and in the third item just to see that we can change the style in between list items

also we have given type equal to 1. This means that we are saying that you follow the roman numbering scheme for all the items by default only for the third item you follow the conventional numbering scheme. It means the so called Arabic numbering scheme that we use. Let us see that if this file is displayed on a browser how it looks like.

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It will look like this. See this roman number 1, 2 and 4 are coming correctly but the third one I had set to display in Arabic. So instead of the roman three, it is coming as the numbered three. But of course this is something which you will not be doing in practice. This is just to illustrate that you can do all this things you can explicitly specify the style of the individual list items and they will go on changing accordingly. So it depends what kind of style you want to have in a list.

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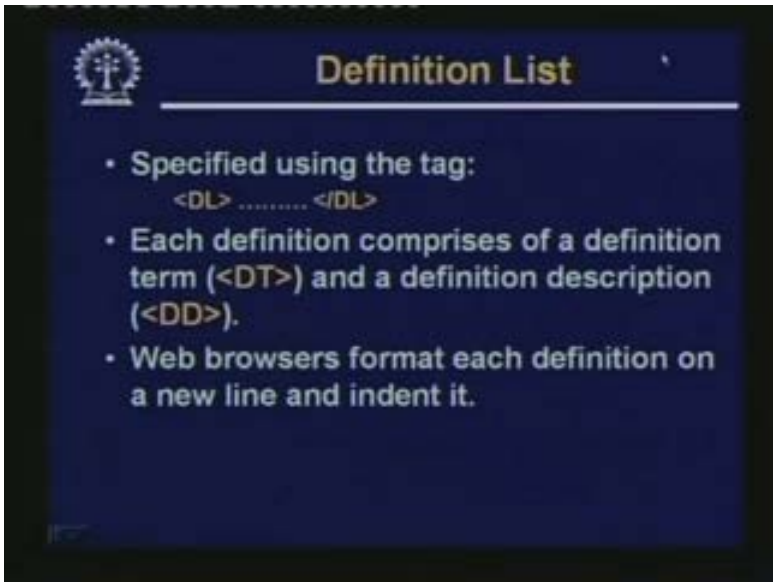

Now we move on to something called a definition list. Well, let us first try to understand what is a definition list? Well in the unnumbered or the numbered list that we have talked about, there we have a set of items which you want to group them one after the other either by putting a bullet before them or by putting a number before them. Right? But in many cases we need to compose a set of definitions in one place. That is why this is called a definition list say a term and its definition. Second term its definition. So there will be a number of terms along with the definitions I want to put in a suitable formatted way with suitable indentation so that I can have it one place. So this is what is called the definition list.

Now the things to note is that for a definition list the tag name is DL, begin DL and end DL and there is another difference in case of the unnumbered and numbered lists. The list items were specified using the LI tag. But in case of a definition within each list item there are two things to be specified the definition term or the item you are defining and the definition description. So there are two things you need to define in every list item here. So for that there are two separate tags you use one is called DT or in short, this is the short form for definition term or there is DD which is definition description. So if you have such a list the web browsers can automatically format the definitions by starting each definition on a new line and composing the definition in a suitable way.

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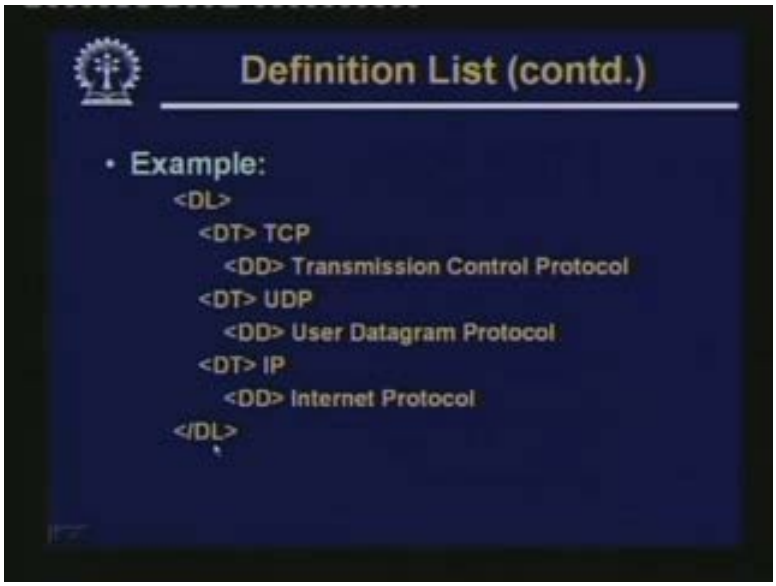

This is just an example how this DT and DD can be used inside a DL. You see you have a lists, this is the beginning of DL. This is the ending of DL in between there are three definition items. In each of these item there is a definition term for example TCP. Then the definition description transmission control protocol. Then again a DT UDP followed by the definition description user datagram protocol. Then again a term IP then the description internet protocol. So in a definition list the point to note is that the DT and DD will always appear in pairs, there will be a number of DT DD pairs appearing one after the other. If there are n-numbers of such DT and DD pairs, there will be n number of elements in the definition list. Now let us take a complete example.

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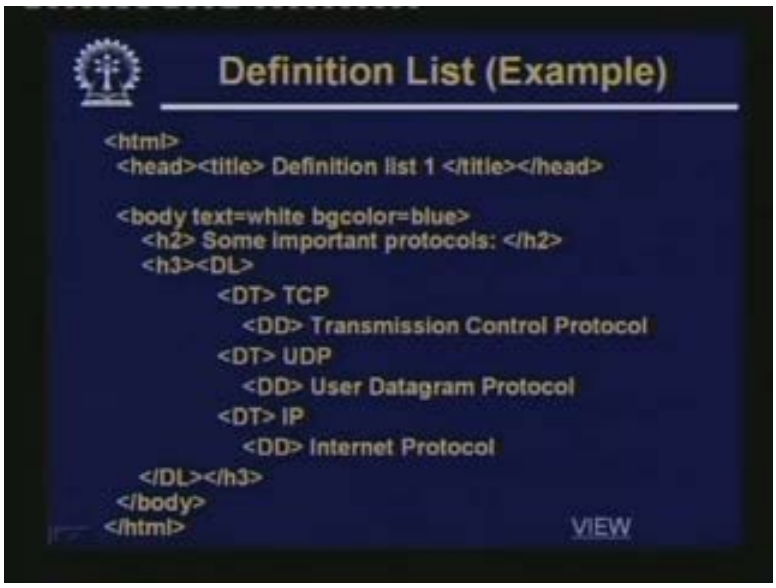

This is a complete example which illustrates the use of definition list. It is the same example that I have shown in the previous slide. I have shown here, but this is this is encapsulated within h3 to make it appear bigger and of course there is a heading h2. Some important protocols, this is the file now if we display this on a browser. We see something like this.

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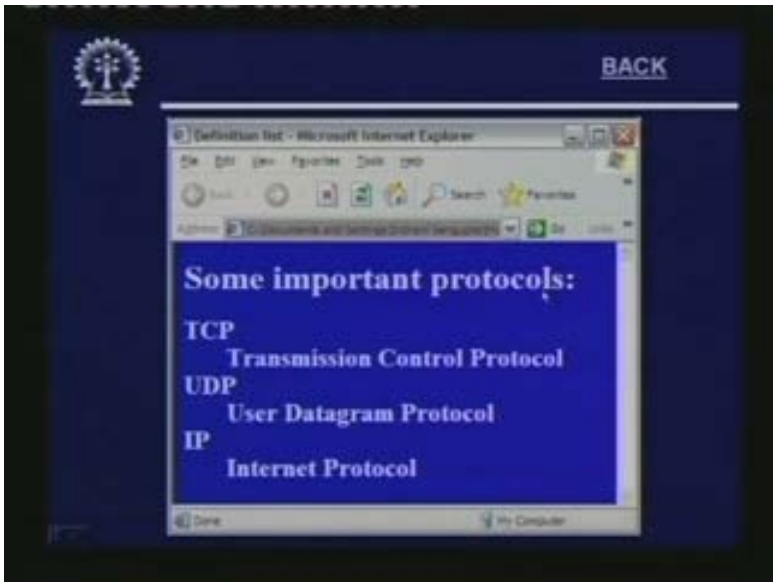

Some important protocols this the heading and under the heading we have. Transmission control protocol, this is the description for this item TCP definition term UDP, user datagram protocol; IP, internet protocol. So these definition terms and the descriptions will be coming in this way suitable formatted and indented. So this sometimes you can use to show some short terms items and their descriptions or definitions. Now in this example I have not shown but just let me tell you that whenever you are defining this DL here, DL can have a optional attribute called compact. If we use that compact that attribute does not have any value just DL blank compact. If you use this compact option then some browser will try to display the list in a compact form like in this example as you have seen that when you see it on a browser it looks like this. TCP appears on one line and transmission control protocol on the second line. But in the compact mode both will be appearing on the same line only there will be a space in between.

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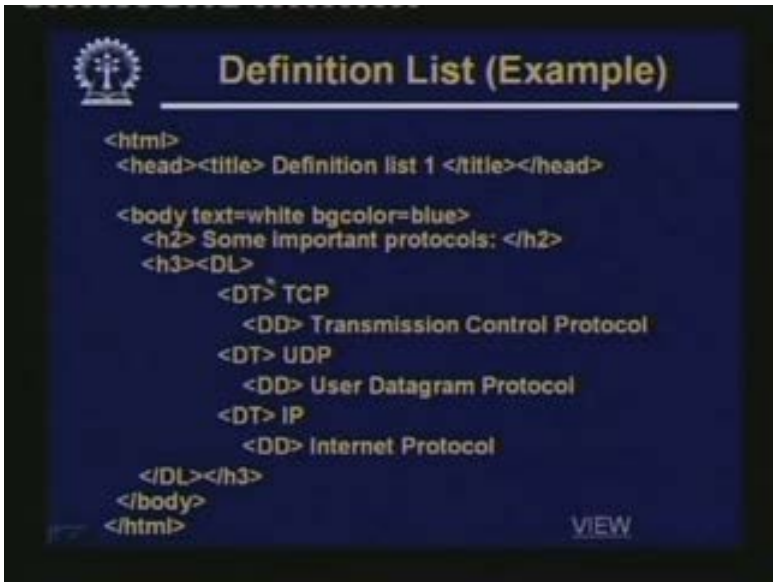

So there will be the term TCP coming before that there will be a space then followed by the description. This will true for other definitions as well.

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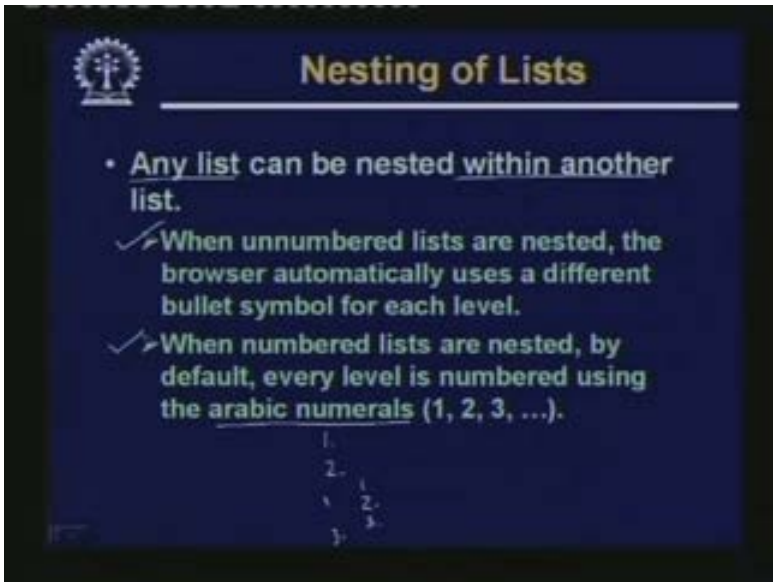

Now this three kinds of lists that we have talked about, it is possible to nest this kind of lists. So you can nest any list within another. Well when you say any list can be nested within another, this means any kind of combination between of numbered, unnumbered and definition list and unnumbered list can be nested inside an unnumbered list. Numbered list can be nested inside a unnumbered list numbered inside numbered definition inside unnumbered any order any kind of nesting allowed. So there are two

things you just note. Well, for the definition list any way there are no numbers or bullets which are generated. So they do not create any problem but when you are nesting unnumbered list.

There is a point to remember. So when unnumbered lists are nested, the browser will automatically try to use a different bullet symbol for each level of nesting. What this means is that if you are nesting an unnumbered list inside another unnumbered list, then for the top level list possibly the disc bullet sign will be used by default. In the first level of nesting you may be using the circle or the square bullet. In the third level of nesting if you are nesting another unnumbered list inside the second one it can be the third bullet type. So the browser will automatically try to use a new bullet type for each level of nesting right of course from a practical point of view.

You cannot nest beyond a number like three or so because your, the width of the browser is limited and each indentation will be eating up some space. So beyond a limit you will not have any space for you to display the list items. But unfortunately when you have a numbered list browser does not apply this intelligence by default. If you do not specify anything every level will be numbered using the Arab numeral which means the top level will go as 1, 2, 3 and if you have a nesting again the nested level will be 1, 2, 3. So the same style of numbering will be used for the top level, next nested level and so on by default. But if you explicitly use the type attribute to specify what type of bullet you want to use then of course it is all right.

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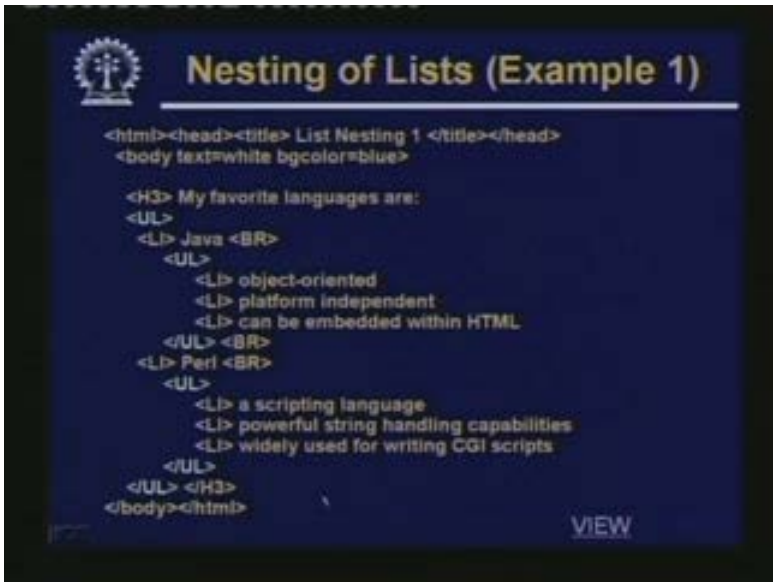

Here you have an example of nesting. Here in the top level you have a unnumbered list, this is begin, this is end. Now inside this you have a nested unnumbered list here and another nested unnumbered list here and inside this you see that there are two list items. So within the top level list there are just two items one is called java other is called Perl and after java another list starts which will be nested inside the top level list object

oriented platform independent etcetera. Similarly Perl a scripting language powerful string handling capabilities and so on. So this shows nesting of an unnumbered list inside another unnumbered list. Now if this is displayed on a browser, you will see something like this.

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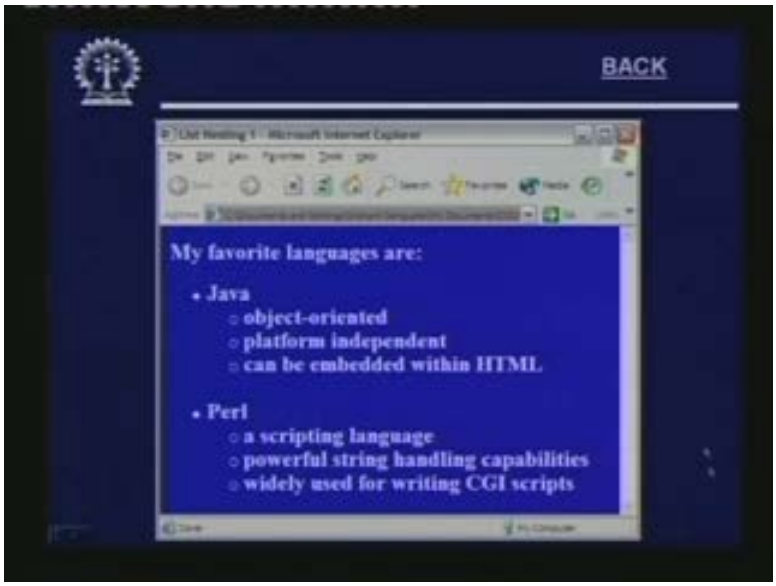

My favorite languages are will be the heading. In the top level list, this disc style will be used. Java and Perl will be having the disc style of bullet. In the nested one the first nested list has three item the second one is also 3 items. Here the circle type is used. So this the browser is doing automatically by default the user need not have to explicitly do this.

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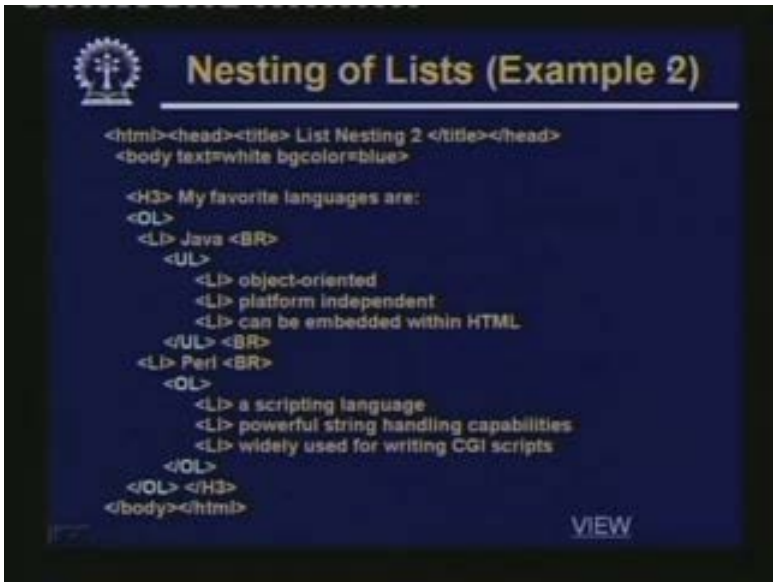

This is another example. Well the matters of the contents are the same. But the types of list is different the main difference is that here you see instead of unnumbered list the top level list is an ordered list. You have OL you have OL. So now java and Perl will be numbered as one and two in terms of the nesting the first nested list is unnumbered. The second nested list is ordered or numbered. So this is a mix of numbered and unnumbered list. The top level you are saying numbered inside the top level you are nesting two more lists. One of them is an unnumbered one and the second one is a numbered one. Now if this again is displayed on a browser. It will look like this.

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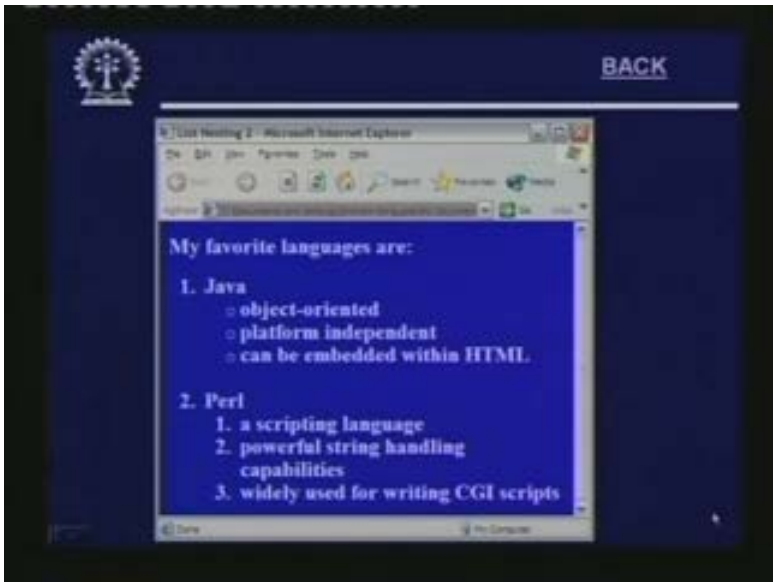

First level 1, 2, this numbers will come. Now since the unnumbered list is appearing on the first level of nesting, in the first level of nesting by default the circle style is used for the bullets. But for an ordered list even if this is the second level the numbering scheme, this 1, 2, 3 Arabic numbering schemes is used. This is what I had mentioned. So if you want to have the lists more meaning full you can explicitly say that in the second level of nesting we use the numbering scheme a b c or the roman 1, 2, 3, something like that.

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Now we start another topic in html. This is how we can specify the hyperlinks because you know in html one of the very important features is to specify hyperlinks. Because html is a language in which you can provide links from one document to other resources. It can be another document, another image, some other file like pdf or script anything. So the way we can provide this kind of links is very important and these kinds of links are called hyperlinks.

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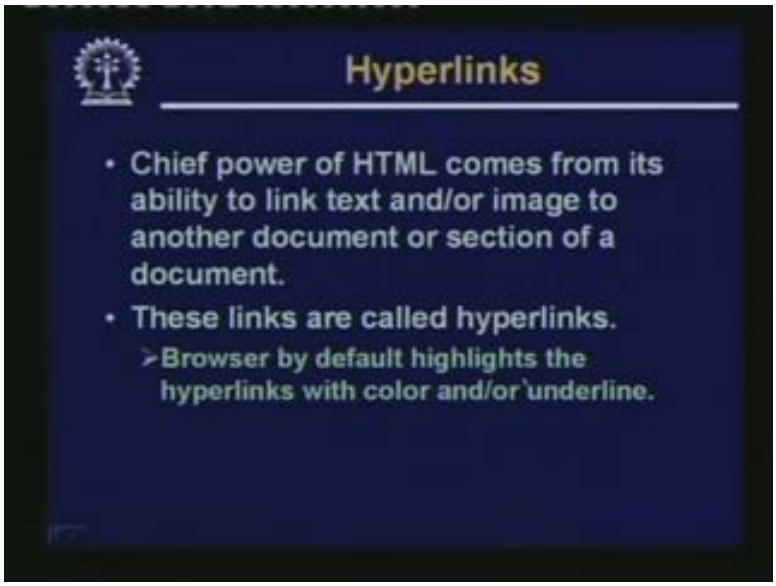

So basically hyperlinks give the main power to html. Because if you look at it, the reason html has become so popular today. This is because you are able to browse through the net, you start with a page you click on the links you go to other pages click on some other link go to some other pages and so on. So this is possible because html supports this kind of linking to other pages. So html has the ability to link text, image, well or any other resources. Here I am showing text and image it can be any other thing also, it can link these to other documents or sections of a document. These links are called hyperlinks. And usually by default of course you can change this default.

By default whenever you specify a hyperlink as part of an html page, browser will highlight the hyperlink either by displaying with a different color underlining it or both. This you may be familiar with many browsers display a hyperlink by a blue color and underlined. Of course this conventions can be changed this is the default convention blue underlined. Means the browser tries to highlight, because otherwise you will not know that in your whole document which are the portions where you can click in them using the mouse. So only those highlighted portions are clickable. If you click them you can go somewhere else.

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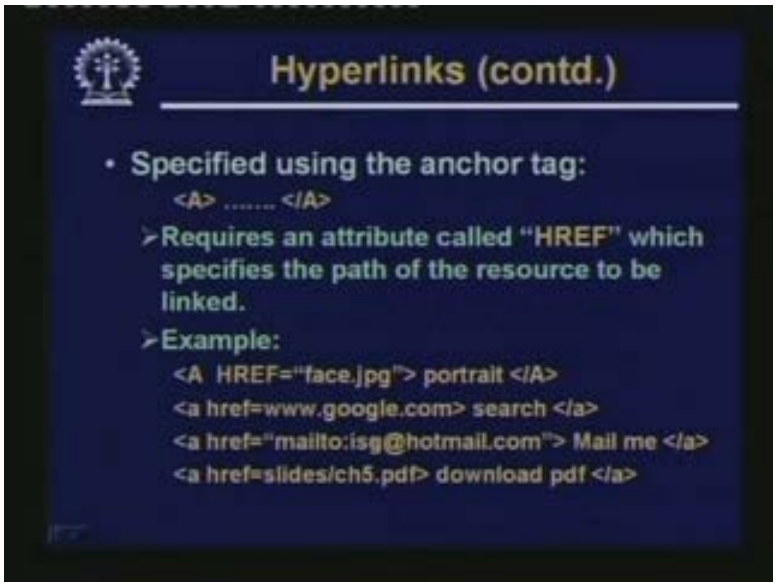

Now let see how we can specify these hyperlinks. These hyperlinks can be specified using the so called anchor tag. This anchor tag is named as a simple a begin a, end a; a means anchor. Now whenever you are using this anchor tag, you are actually trying to link to some other document or resource. So somehow you must specify where this some other document or some other resource is located that is mandatory without that this anchor tag will not carry any meaning. So for the anchor tag there is a mandatory attribute called href or hyperlink link reference in short href. This is an attribute which has to be used along with this anchor tag and this specifies the path to the resource which you want to link. Now here we have given four examples. The first example shows this is the begin anchor tag. This is anchor href equal to face dot jpg. So here we are point to a jpg image we are pointing to a resource which is actually an image. Now after this tag there is some text and finally there is the end tag. So the text which is lying between the, begin and end anchors that will be the text which will be displayed highlighted on the browser and that is the text on which you can click using the mouse. So there will be there will be a highlighted text called portrait. If you click it on the mouse, click that portrait with the mouse you will go to another page where this image fae.jpg will be displayed. The second example here well this also shows that href, everything is a case insensitive you can put it as upper case lower case or any mix and also this quote double quote this is optional. In the second example I have not given any quote. Here we are basically linking it to some other website www.google.com and the text between is search. So there will be a word search displayed which will be highlighted, if I click on search we will be Google. We will be going automatically to the Google website. The third example here we are not providing a link to a document. Rather we are providing a URL which starts with mail to. Now recall we had mentioned earlier when we are talking about URL that if it is a mail to URL, then whatever you are specifying after that, that will be treated as an email address and automatically a mail window will open on your machine provided mail is installed on your machine. So in this case whenever these kinds of an anchor tag you have specified mail me is the text between. So this mail me will be

displayed in a highlighted way. If you click on this mail me, then a mail sending window will automatically come with isg@hotmail.com as the destination address. And the last example shows you that you can provide a path to a certain document. So it need not be a file in the same location or the same directory you can also specify a path name. This says that you provide a link to a file which is under the slides directory and the name of the file is ch5.pdf and this will be a text which will be displayed in between.

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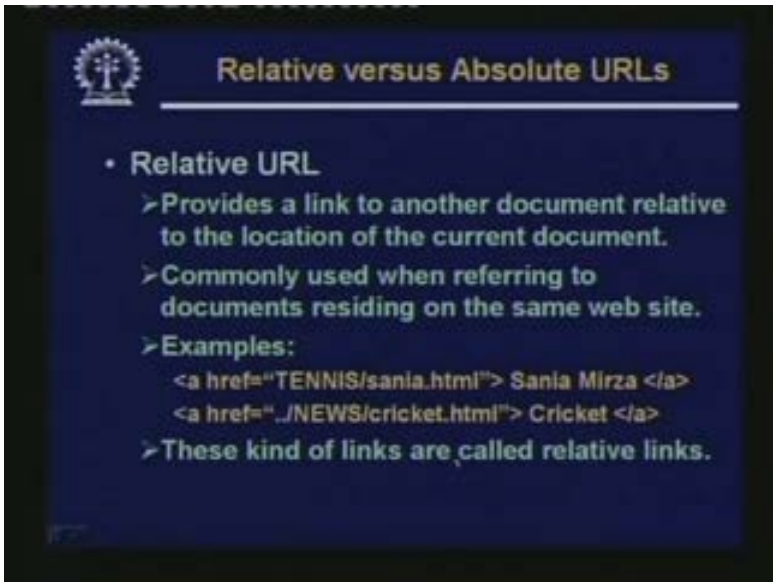

Now let us look at how we can specify these links. Well we have said that href is the tag which you can use. Href is the attribute sorry. Href is the attribute which you can use is an attribute of the anchor tag. Now in href you can specify the name of the resource. But there are two different ways we can specify this either using relative URLs or using absolute URLs, relative URL as the name implies this provides a link to another document relative to the location of the current document. What does this mean? Suppose I have obtained the page which is currently being displayed on the browser from suppose a site www.sun.com.

So this page was fetched from sun.com site. Now if I link on some of the link which is available on the page, obviously it will go there. Now this link may refer to some document or some resource which is not present in the sun site it is somewhere outside sun or it may also refer to some document which is within the sun dot com server may be in some path. So in that case we need not explicitly specify www.sun.com, then this path name because it is already from the same server from where I have got this document. So you need not, if you need only specify the relative path name the browser can do the rest.

Browsers know automatically that this particular file which is being displayed was fetched from a particular address. So it will compose the complete path name by appending the relative path with that site name. So this is a very convenient way to do it instead of providing the entire path name you can just mention the path of the resource

with respect to the current document. This is commonly used, as I said when you are referring to documents which are residing on the same web server. Here I have given that sun.com site.

There are two examples. Suppose the first example, I have a reference to a file called sania.html which I am not specifying the whole address. I am just specifying it is under a folder called tennis and the name of the file is sania.html. But I have not specified that which web server you have to go to find this piece of document. By default the browser will go to the same web server from where the page that is currently being shown was fetched. So this will be the hyper text this will be text which will display on the browser and this will be the link.

The second example shows you can also provide or use this symbol dot dot to go up one level in the directory hierarchy. You go up one level up the directory then go into a new sub directory, then the cricket.html. So these kind of relative path specification symbols which you normally use in systems like windows or UNIX you can use here also. Dot dot means go one level up the directory hierarchy slash means go one level down. So you can use these symbols to specify any path. These are example of relative URL because you are not specifying the whole path. The links you are specifying here are also called relative links because these are relative to the current document.

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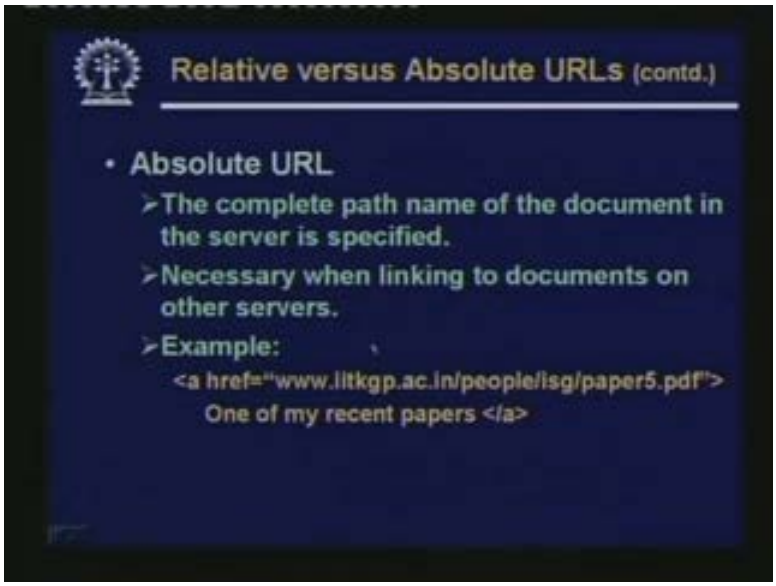

Similarly you can have absolute URLs. An absolute URL refers to the complete path name of the document in the server specified. When you say complete path name, this also includes the name of the server name or address of the server. Now this absolute URL is mandatory. This must be used when you are linking to documents on some other server. Suppose I have a page which is getting displayed, which I have obtained from www.sun.com server, in that sun.com server there is a link which if I click should go to

the yahoo site. But if it is some other site I must specify the entire path because it is not a relative path name.

For the relative path name it will automatically go to the sun site by default. But here since it is some other server you must explicitly specify the path. Just an example is shown here. This href well when you give href you can give http colon double slash some browser or so take it automatically. But it is a good idea to enclose this explicitly. This http colon double slash then the name of the server then the path name under the under the http root where the requested document is located, then the text which will be highlighted. Just one point the text which will be highlighted I mentioned this will be displayed on the browser well either colored or underlined or both in some way. This part of the text is called a hypertext. This is the text with a link to other resource.

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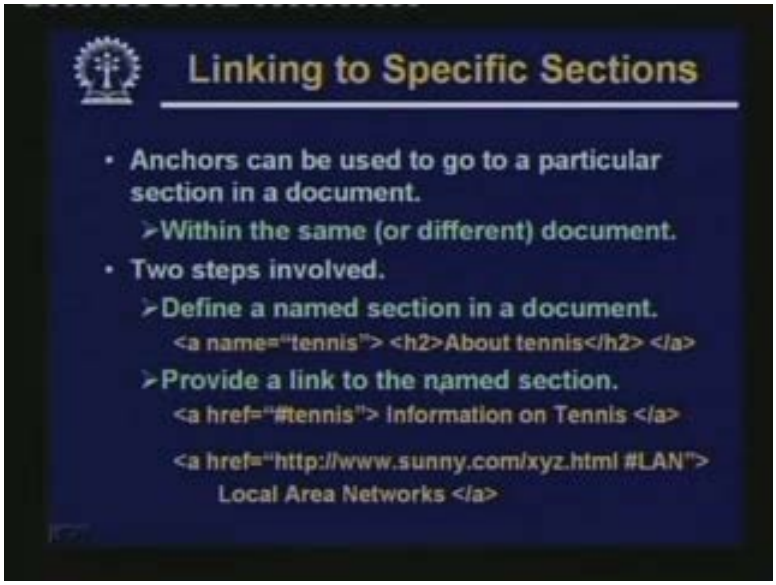

Now let us look at something which is slightly more general. So far we have said we can provide a link to another document. Link to another document means we specify the name of another document. If I click on it, I get that entire document on my page. But I can do something more. Well I can specify something like this; I want to go to section three of that document. So I do not want to start at the beginning. What I would like is that that particular document will come on my browser? But it will automatically be scrolled up so that I see on the top my screen that it is starting with section three. So that I need not have to search through the document to go through section three. Now this kind of linking can be done with respect to the same document. Well you might have seen that there are many web sites where some online tutorials or online books are there. So when you click on a chapter or a subsection you go automatically to that chapter or sub section those are part of the same file.

This is what I am meaning you link on it you go to the same document. But another part of the document going means a document is automatically scrolled up or scrolled down

so that part of the document where you want to go is visible on the screen. So here we are trying to tell you exactly that how this is done we want to link to specific sections of documents. Well here also we can use the same anchor tags. There are two steps involved in here. If you want to do this you have to go through two steps. The first step is like this. Suppose I have a document and I want to provide a link to three points in this document. There can be a link to the beginning there can be a link to somewhere here there can be a link to somewhere here. So first thing I have to do is that I have to specify some names to these three parts or portions of the document. Then in the hyperlink I would be referring to the document with these names so that automatically it can go there. So the first step is to define a so called named section in a document.

This can be done by using the anchor tag by using a attribute called name anchor tag name equal to you are giving some name to it. Say tennis well this can appear anywhere in the document. Suppose it is appearing in a header this about tennis is appearing somewhere in the document I want to provide a link to that particular section. If I link it will automatically go to the about tennis section. So possibly about tennis is starting with h2 and ending with h2, so I am putting this heading within this anchor tag. This anchor tag can we put in fact anywhere you want. But most naturally it can be put it is put in terms of some headings or in terms of some sections of your document. So once you have defined these names, you can provide a link to the name section by using href. The same name you gave but the only thing is that you have to precede the name with a hash symbol. Hash tennis means this is a named section of a document and this is the text that will be highlighted.

Now this particular information in this first example this means that this particular thing is residing in the same document. Because href contains just the name. So it is a link I am trying to provide within the same document. But you can have a link to some other document also and the second example illustrates that. So you give an absolute URL then you give the name by giving the hash LAN. Hash LAN is a section within this particular website. There will be a slash here, so this will automatically be consulted and it will be displayed on your screen and automatically that hash LAN section will be visible on your window. So the page will be automatically searched to look for that hash LAN named section and that will come automatically. So this feature is convenient when you want to when you want to allow the user to scroll up or scroll down and go automatically to a particular portion of a document. Particularly if the document you are viewing is pretty big then this is a very useful feature.

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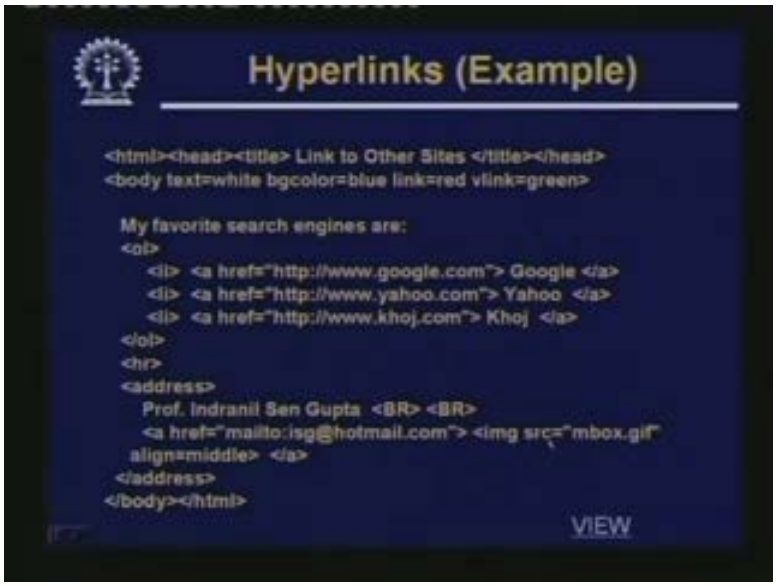

Here we give a very simple example of a hyperlink. So the beginning html and body are the standard things. Well this is just an example which lists some of the search engines well, as you can see that within the body the first text displayed are my favorite search engines are. Then there is an ordered list where there are three list items and in each of these three list items I have given a hyperlink. First one is href is equal to Google.com, yahoo.com and khoj.com. This Google, yahoo, khoj, are all displayed then there is a break then there is an address. My address and mail to is another link and there is a source here which you can click.

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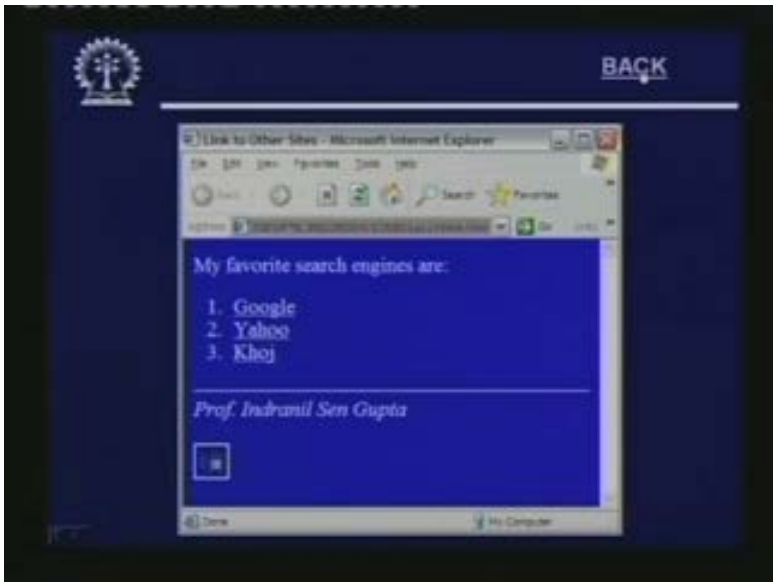

Now if you display it on your browser, it will look like this. My favorite search engines are Google, yahoo, khoj, these are clickable and this image which is displayed below, this is also clickable. If you click on it the mail to window will open.

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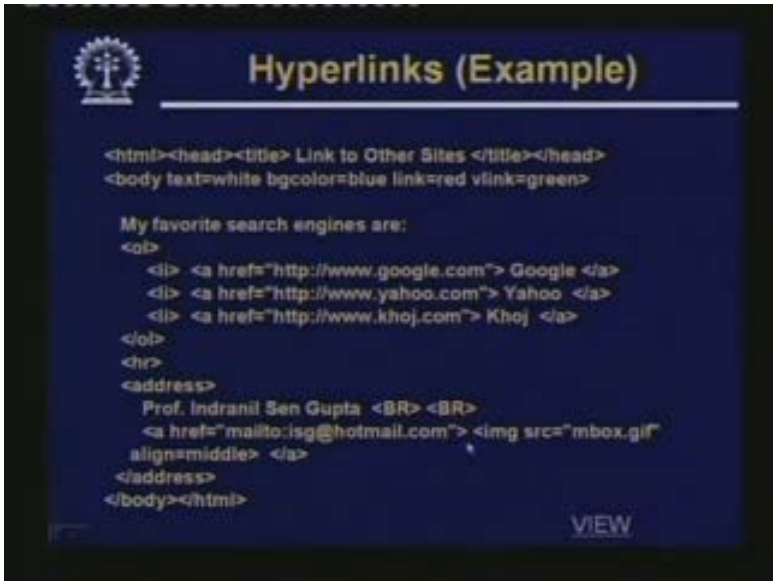
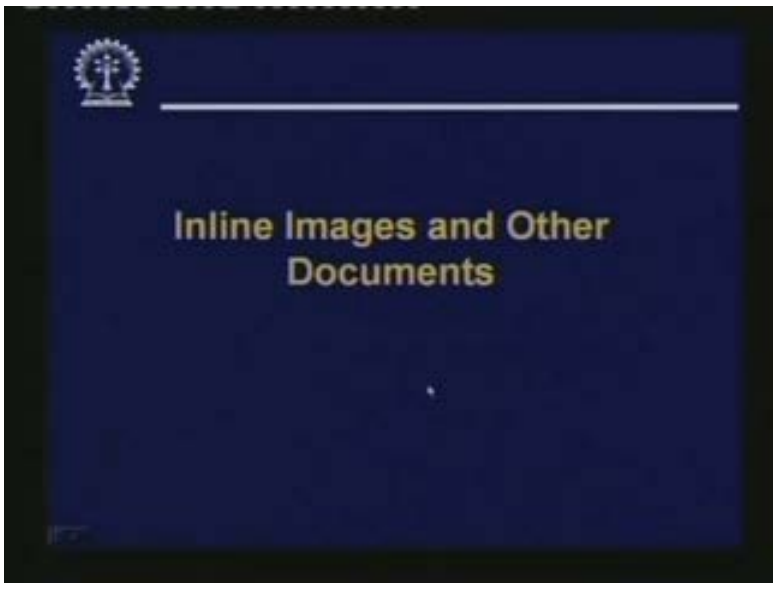


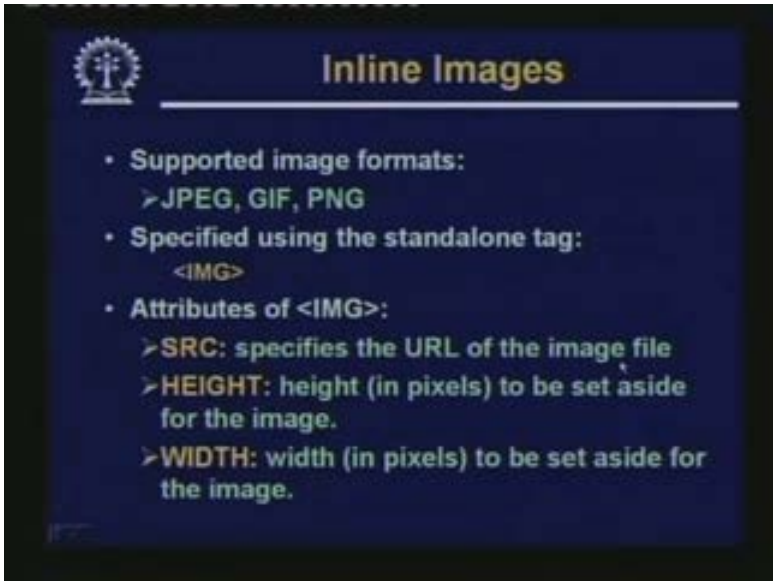
You look at the source this href was mail to isg@Hotmail.com. But instead of a text here I had put an img, an image. You can also have an image with a link to some other place and this example illustrates that.

(Refer Slide Time: 51:32)



Now let us look at how we can include inline images.

(Refer Slide Time: 51:37)



Now with respect to images, there are three different kinds of images which are supported. Jpeg, gif, these two you know obviously and png is a new format which is coming up. This is supposed be a next generation standard, but this is yet to be adopted widely and the img tag is used for the purpose. There are three attributes: src which specifies the URL of the image file, height specifies the height of the image in pixels that will be displayed on the browser window and width is the width in pixels.

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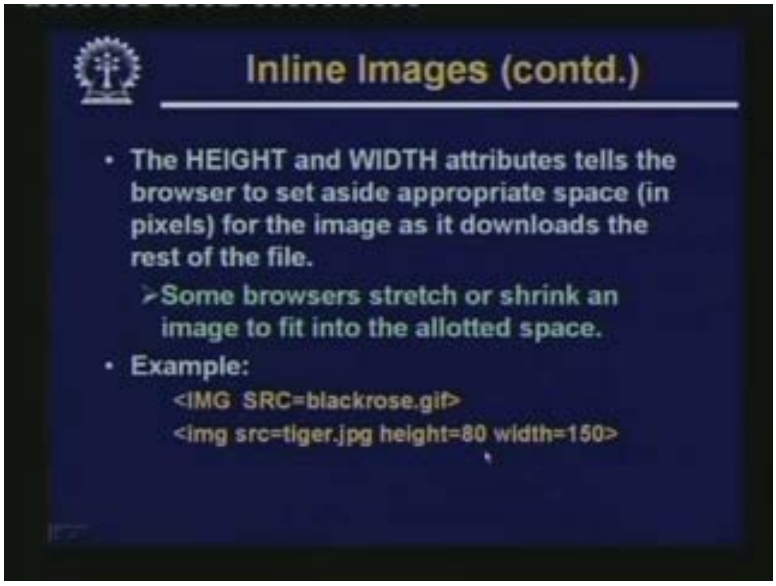
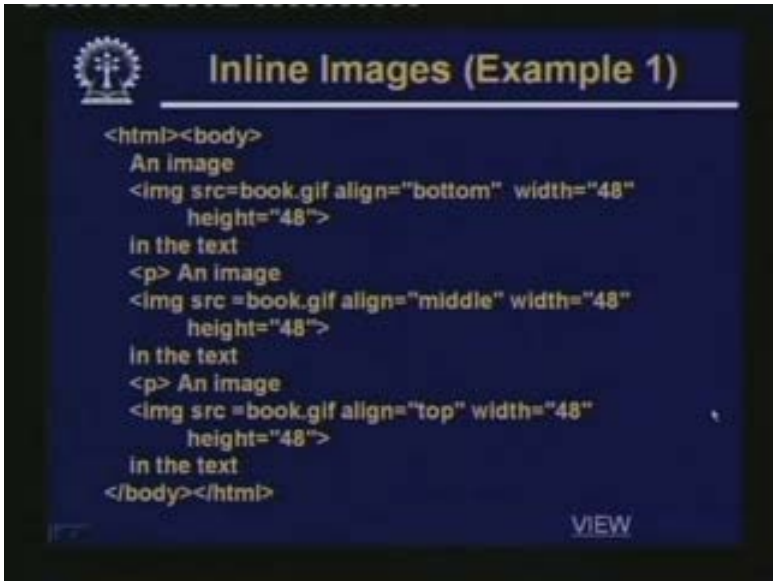


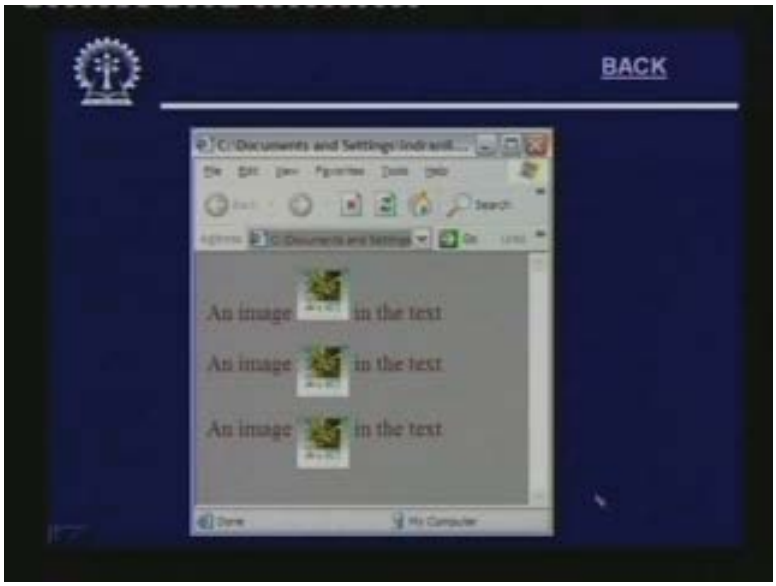
This height and width attribute they do two things. They tell the browser to set aside that amount of space in the window and as the remaining part of the text is downloaded they can be suitably formatted and displayed. And as the image gets downloaded, the image space will be kept. And secondly some browsers allow the automatic stretching and shrinking of the image to fit into the allowed space. Some example this img source equal to blackrose.gif. So the image in its original size will be displayed. The second example there is a source which specifies height is equal to 80 pixels and width equal to 150 pixels.

(Refer Slide Time: 53:06)



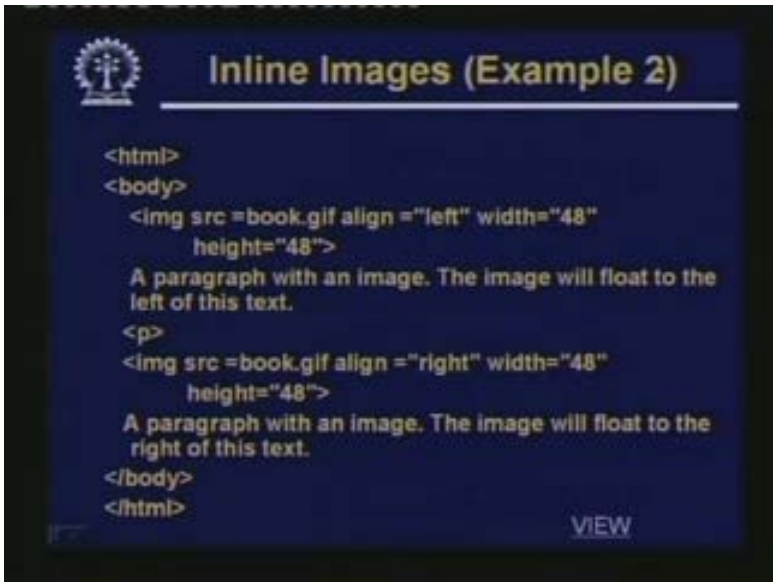
Now let us let us look at few examples. The first example says there are three images. An image then there is an img tag in the text. Img tag's source is equal to book.gif. This is the image file here you have given align equal to bottom aligned with some width and height specified. Then there is a paragraph break the same block but instead of bottom you give align equal to middle. The third one after paragraph break same thing with align equal to top. So bottom middle top. If you view it, it will come like this.

(Refer Slide Time: 53:40)



The text will be coming, but the image will be aligned with respect to the text bottom middle or top.

(Refer Slide Time: 53:51)



The next example here you see you have specified an image. Image is left justified. Here I have given left. Left means whatever comes after that a paragraph; this will be on the right of that image. And the second one this image is right this will come on the right and whatever is after that a paragraph this will come on the left of it. There is a paragraph in between. So if this is displayed on the browser. It will come like this.

(Refer Slide Time: 54:23)

The image is on the left justified then the paragraph will be coming after this image is on the right the paragraph is on the left.

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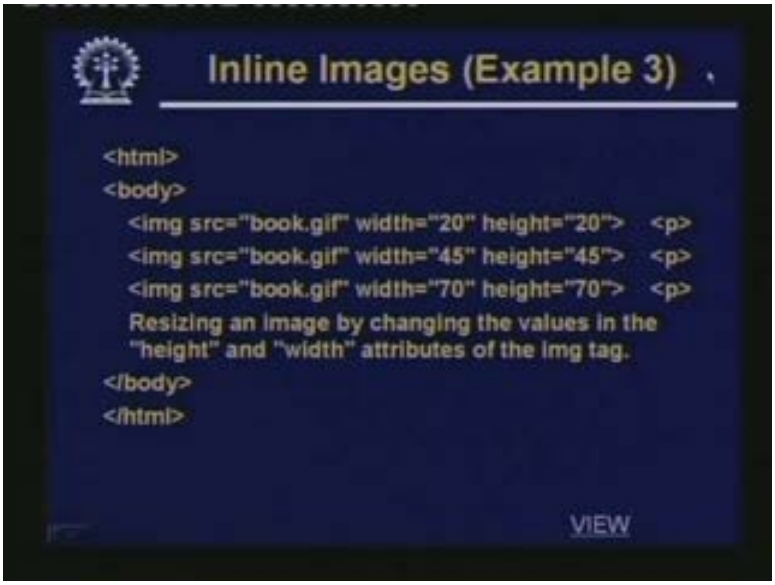
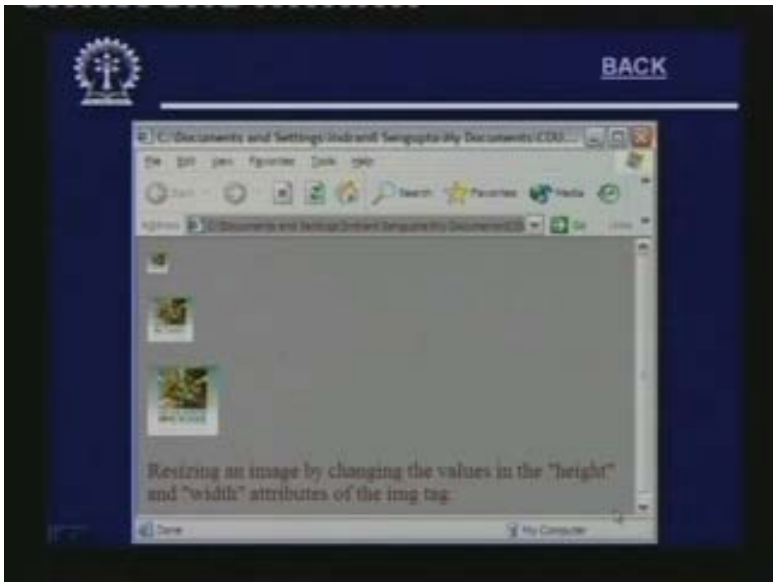


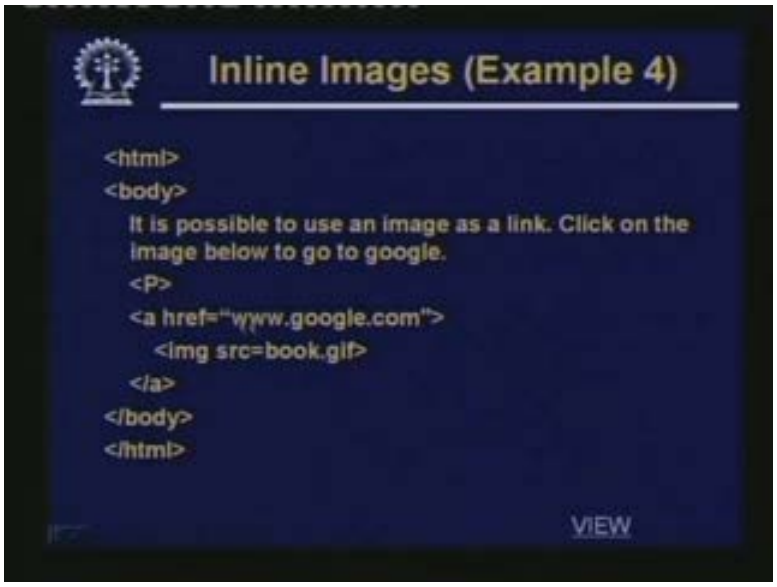
The third example, a simple where this same image is loaded thrice but the width and height are different. It will show you how the image can be resized.

(Refer Slide Time: 54:46)



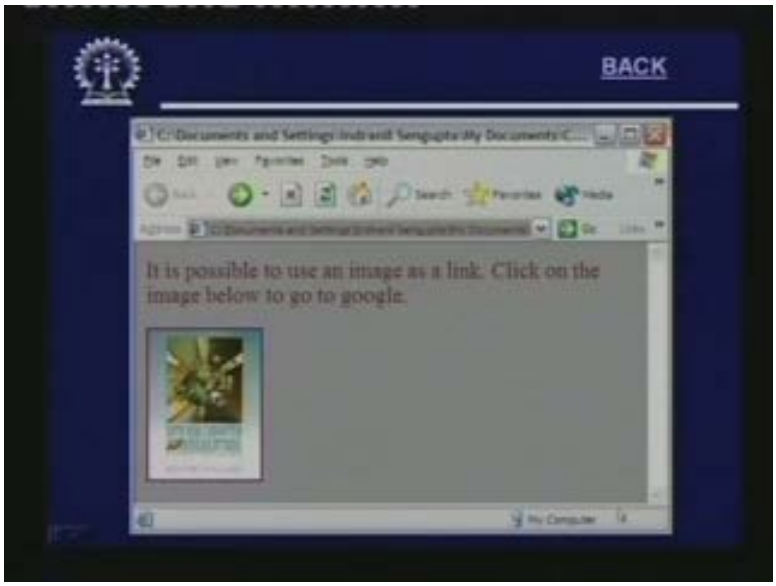
If you view this, you will see like this. You will see that the image sizes are getting different. So the browser will automatically try to resize the image.

(Refer Slide Time: 54:57)



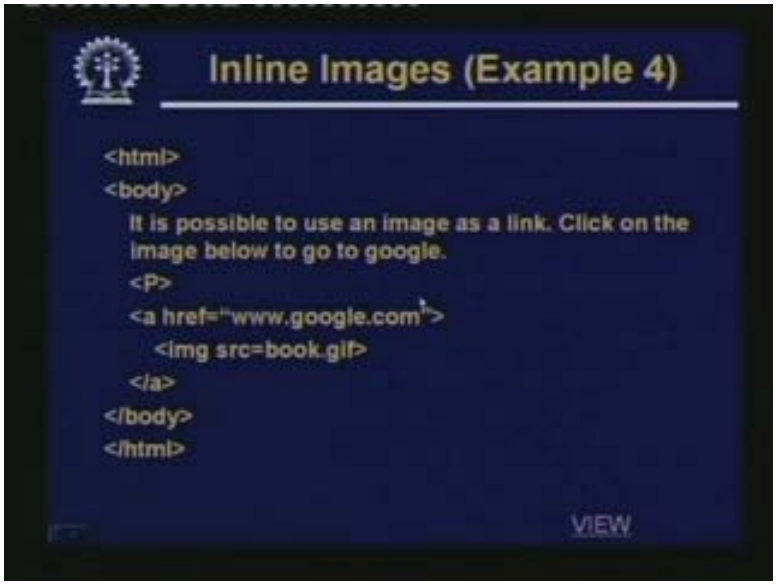
In the fourth one show shows that an image you can use as a clickable hyperlink. This is a clickable image. So within the anchor tag instead of a text you can put an image. Image source is equal to book. So if you simply display, this on a browser it will look like this.

(Refer Slide Time: 55:18)



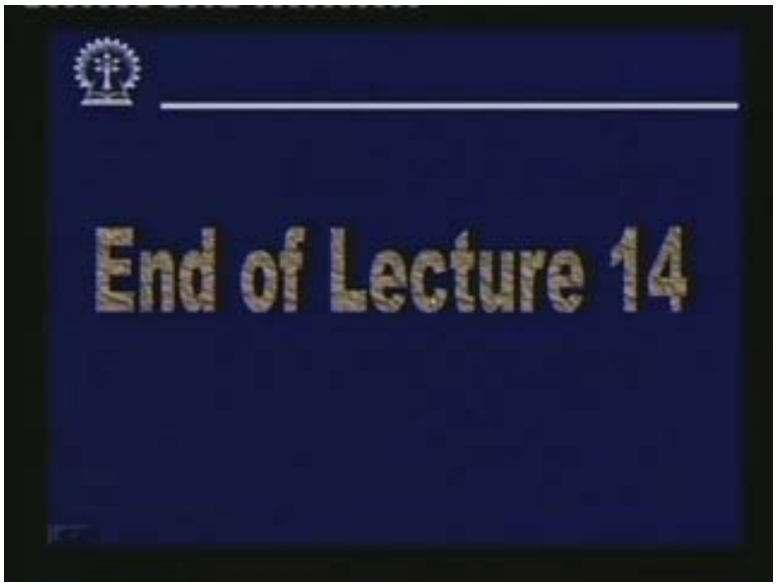
And this particular book image will be clickable.

(Refer Slide Time: 55:24)



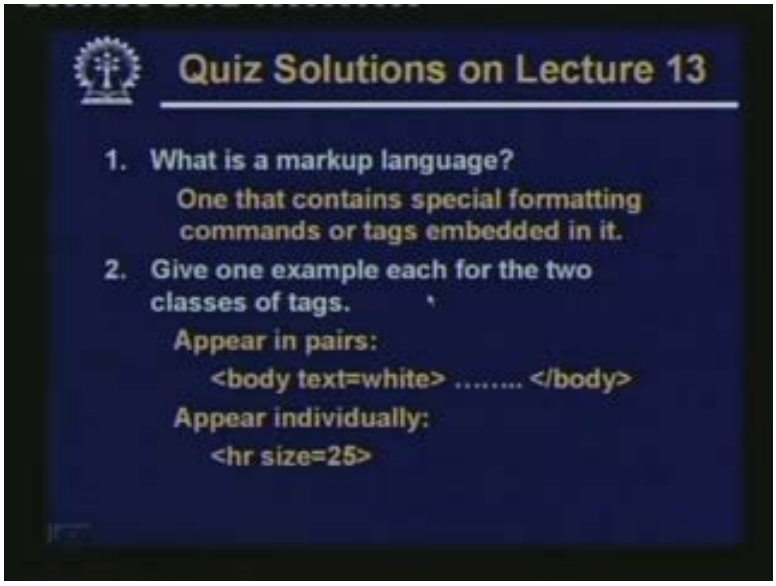
If you click on this you will go to this particular Google.com site.

(Refer Slide Time: 55:6)



So with this we come to the end of our lecture 14. Let us now quickly look at the quiz questions and answers of lecture 13.

(Refer Slide Time: 55:36)



What is a markup language?
It is one which contains special formatting commands or tags.

Give one example each for the two classes of tags.
Well, one classes of tags appear in pairs like body begin body end body and another class which appear individually like the horizontal rule.

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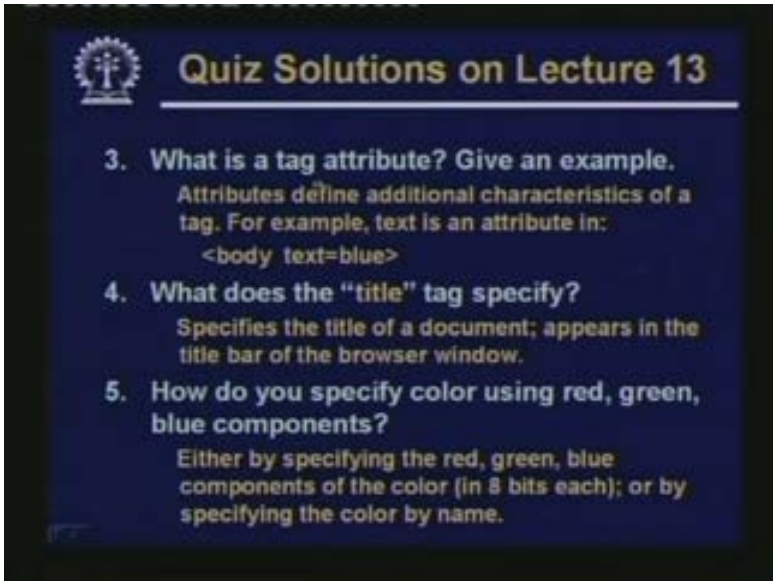

What is a tag attribute? Given an example.
Attributes define additional characteristics of a tag. For example in this body tag text is an attribute.

What does the title tag specify?
Specifies the title of a document appears in the title bar of the browser window. This we have seen already.

How do you specify color using red, green, blue?
Well this can be done either by specifying the red, green, blue, components of the color in 8 bits each. This we have seen in this you can do in hexadecimal or by specifying the color by name there you need not have to specify the red, blue, blue and green.

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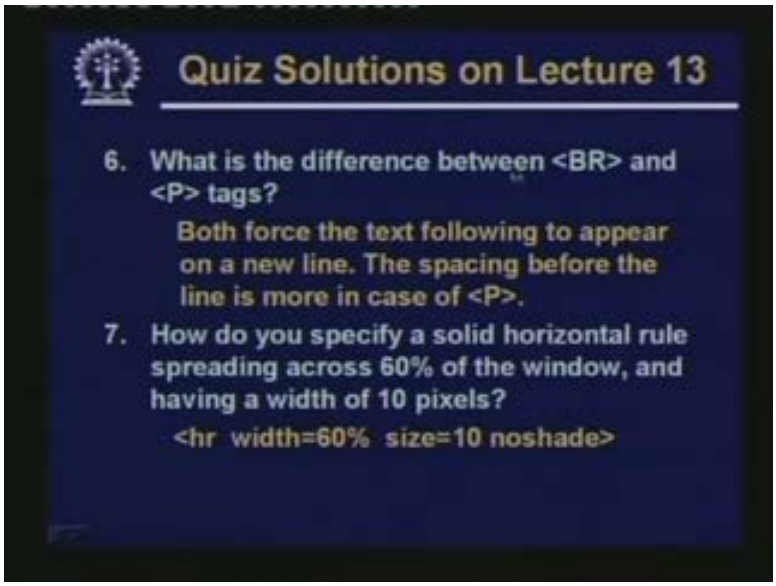
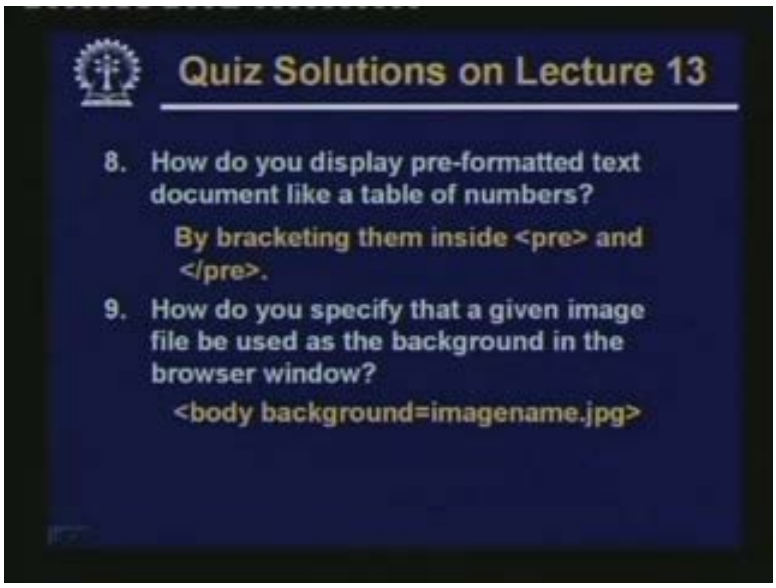


What is the difference between br and p?
Both provide you line break. But in case of p the spacing before the line break is more.

How do you specify a solid horizontal rule spreading across 60 percent of the window and having a width of 10 pixels?
Hr width is equal to 60 percent size is equal to ten and for solid you have to give this no shade.

(Refer Slide Time: 56:58)



How do you display preformatted text document like a table of numbers?

By bracketing them with pre and end pre preformatted.

How do you specify that a given image file be used as the background in the browser window?
By specifying the background attribute of the body tag.

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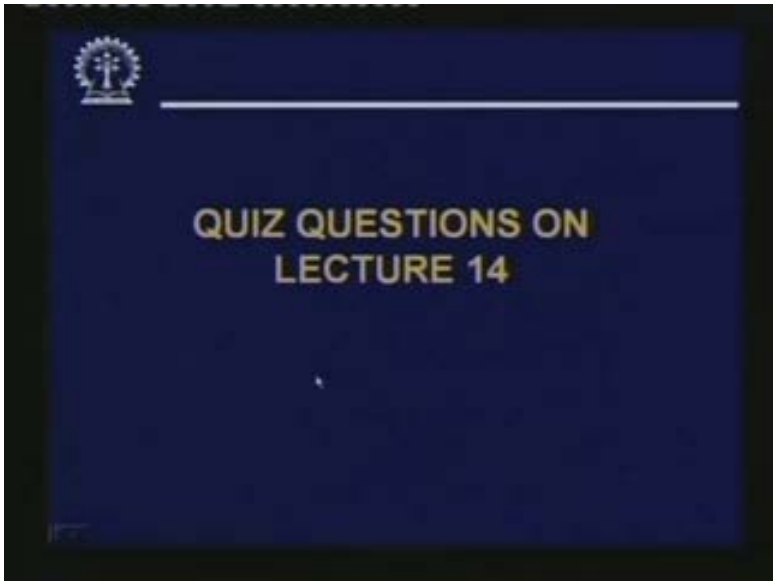

Now some questions from today's lecture.

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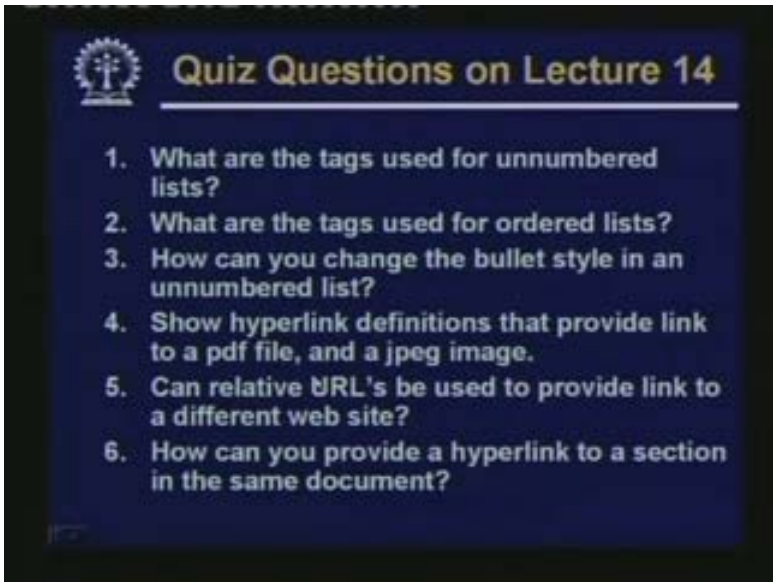
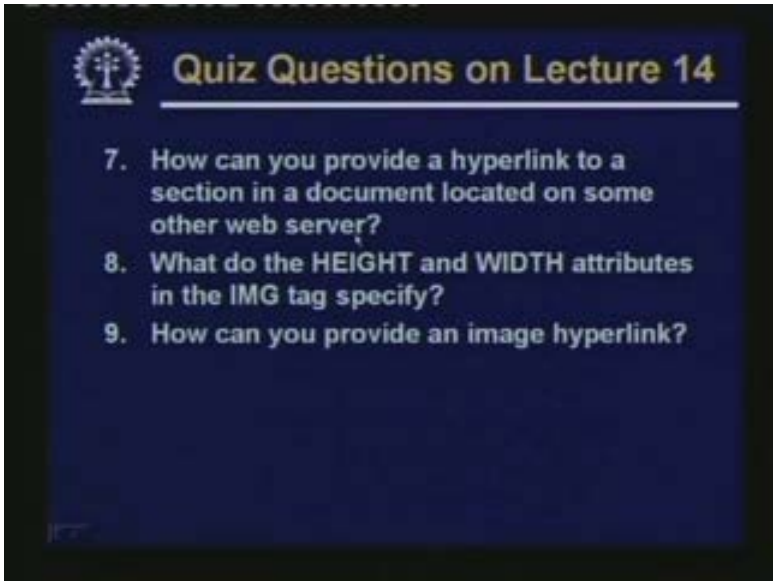


What are tags used for unnumbered lists?
What are the tags used for ordered lists?
How can you change the bullet style in an unnumbered list?
Show hyperlink definitions that provide link to a pdf file and a jpeg image. Some examples I want.
Can relative URL's be used to provide link to a different website?
How can you provide a hyperlink to a section in the same document?

(Refer Slide Time: 57:47)



How can you provide a hyperlink to a section in a document located on some other web server?
What do the height and width attributes in the image tag specify?
How can you provide an image hyperlink?
So with this we come to the end of today's lecture. We shall be continuing our discussion with html in the next lecture. Till then, good bye.