

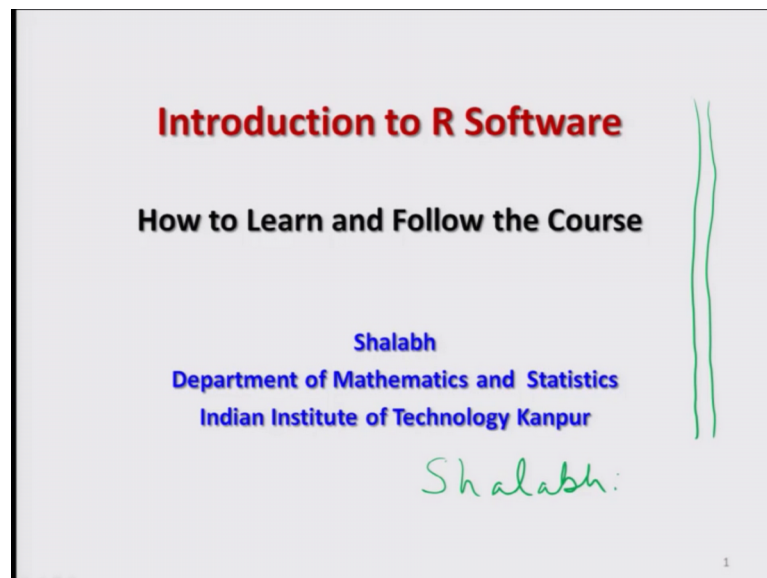
Introduction to R Software
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Lecture – 00
How to Learn and Follow the Course

Welcome to the course on introduction to R software. In this lecture, I am simply going to explain you that how you should follow this course, one thing what you have to keep in mind that we are going to learn a software language. So, unless and until you execute it on the software, you will not understand it. Well in case if you are sitting in my class, I can always instruct you; I can always request you to do something and I can check it, but here it is not possible. So, that is why we have to follow certain rules and I will be recording my lectures following the same rules.

So, first slide will be something like the title page that we can see here.

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And you can see here one thing that I can also write on this screen, right. So, that is the advantage what I have here. For example, if I want to write my name, I can write down with a special pen, right.

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Basics *Headings*

Blue Colour Courier New Font means a **Command or Syntax** in R. *black Calibri*
Copied from R sw.

Black colour Calibri font means usual expression.

Example: = <-

Statement: The assignment operators are the left arrow with dash <- and equal sign = *instructions in R*

x <- 20 assigns the value 20 to x .

x = 20 assigns the value 20 to x .

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So, after this you have to understand few things; the slides will have rather 4 colors; one is here red with which I would try to give the headings and then something will be in blue color; courier new font, this means these are the syntax and commands which are available in R and I have simply copied from the R software from say R software, right. And when you are doing a course you can always copy whatever is written in blue and you can paste it on your R software to execute it directly and with this black color font means I would try to write down the usual expressions.

So; that means, whatever is written here in black color Calibri font, they are the usual expressions which you simply have to read and understand for example, suppose I want to tell you that what is the use of equality sign and this sign which is less than and will hyphen sign. So, I will try to write down here a statement. For example, the assignment operators are the left arrow with dash and equal sign. So, whatever I have written here in black this is only a statement and whatever I have written here in say blue color courier new font these are the instructions or commands in R.

For example, if I try to write a sentence like this one. So, this means this is the instruction and this is a simple sentence which you have to read and this has to be inside the R program, right and same thing is here and beside those things you can see I will be using here a green colored pen something like this.

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Basics

Outcome over R console:

```
> x = 20
> x
[1] 20
```

Copied the output

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So, green color means I am trying to write down something on the screen and then in case if something is continuing on the next slide, then the title of the slide will continue and once I have shown you some syntax, then I will try to show you that what will be the outcome on the R console and I try to copy here. For example, here I simply have copied the command or copied the output from say R software and after this now.

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Basics

Syntax:

$y = x * 2$ assigns the value $2*x$ to y .
 $z = x + y$ assigns the value $x + y$ to z .

Outcome over R console:

```
> y = x * 2
> y
[1] 40
```

```
> z = x + y
> z
[1] 60
```

statements

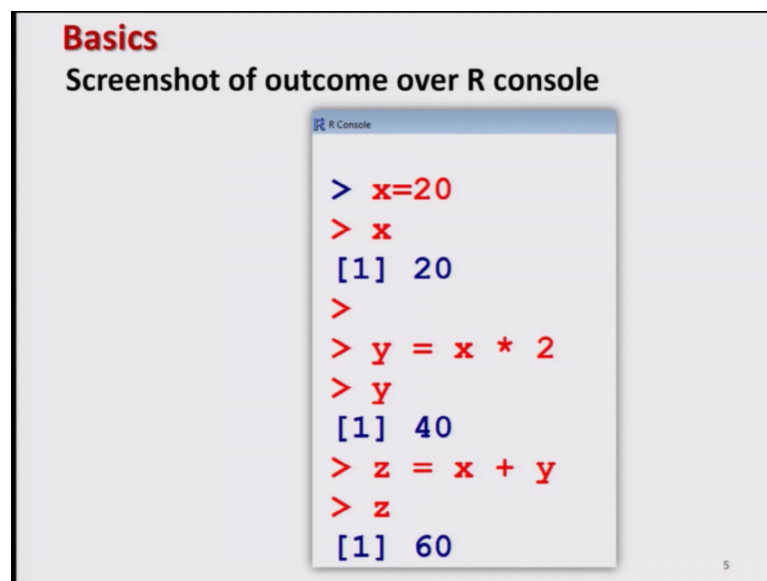
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For example, if I try to write down that y is equal to x star to this assigns the value 2 star x to y ; that means, whatever I have written here in black color they are their statements

and whatever; now I am trying to write down with the green color this I am trying to explain you right and similarly here, right.

Now, whatever I will execute in the R software called as R console this, I will try to copy and paste over here, you see I will try to show you and whatever I am doing this, I will try to show you on the R software also. For example, like this for example, I will first I try to copy x is equal to 20 and I come to here, R software and here I try to paste it.

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The screenshot shows an R console window with the following text:

```
Basics
Screenshot of outcome over R console

> x=20
> x
[1] 20
>
> y = x * 2
> y
[1] 40
> z = x + y
> z
[1] 60
```

The text is color-coded: the prompt character '>' is blue, the commands are red, and the output values are blue. A small number '5' is visible in the bottom right corner of the console window.

So, I can get here x equal to 20 and then I come to my next command, I simply try to copy and paste in the R software and then I copy another command and I try to show it over here, I simply paste it here. So, now, you can see here I am getting the value of here; x like this, y like this and z like this and whatever is this outcome that you can see inside this R software, I try to take a screenshot and I try to paste it in your slides also for example, you can see here; right.

So, this screenshot will help you in knowing that whatever I am doing it here you can also copy it. So, what you have to do you simply have to start listing my lecture and whatever I am doing you simply have to copy it on your own computer and believe me; unless and until you try to execute the same commands with your own hand on your own computer, it will be very difficult for you to understand the syntax and language of R software. So, this is how we are going to learn the R software in the course. So, have fun

and enjoy the learning and we will see you in the next lecture with a formal start of course, till then goodbye.