

FLAMES 05

Alright guys, so in the previous videos you had seen how to play the game of flames we had raised it with an example then we say some pre requisites i had asked you to give a try to writing a code then this videos we have to take it as a guide lines just a guide lines that's it this is not the only way by which you can do, you can do it in multiple ways so please discuss if you have another way in the discussion form and so in the previous i had started off by asking for input of two persons names, converting them into uniform format of all small letters i had trimmed off the spaces and now we have to see how to remove the matching letter that is the functionality we want to see. so let me say i will define this functionality here define remove matching letter right? That was the functionality right? so let me define it here so it had taken two parameters list one and list two it had taken two parameters so let me use it so what should i do? I have to take a letter of the first list take a letter check if the letter is present anywhere in the second list if so there is a match and you cross out otherwise you proceed with the next letter that's what you are doing right? so for that what should we do we need to run loops so how many loops? Two loops, because we have to match for each letter at which position in the second list you have the occurrence of that letter so we need to have two loops so let us do that. So let me start my first loop for i in range so basically you are actually going through each and every index and checking the element right so i have to find the i have to check through till you reach the length of the string so range you have to give the end value plus one right basically so i want to go till the end of the string basically end of the string is nothing but length minus one that is the index of the nth so length minus one nothing but length we have to stop at this i guess you are familiar with this just that why we are giving it as length i was giving an explanation that's it length of this list you have to pass that is for that many number of iterations that is for that many number of letters you want to make a check right? so iterate it over the first list same like that you iterate it over the second list for j in range length of the list l to k so what should you check? If the letters are matching so how would you check it? You have to use by indexing right so by name of the lists followed by square brackets within the square brackets you need to give the index so we will do the check now if the list one at the position i at the index i and the list two at index j contains the same letters that is check by equal to operator double equal to operator which checks the equality if they both are equal then you capture that letter that is your common letter you have to capture it common letter that is why i have used the letter c, c for common, common letter you can use l one of i or l two of j because both are equal right both the vales are equal so you can use anything here and now you have to remove the elements from the list so that's what we will cross out in a paper we will cross out but in computer how do you cross out so crossing out is nothing but removing it from the list that is what we will be doing it. So let me remove l one dot remove is the functionality remove this element from the list and l two dot remove element same element c alright so now we will have to find once the letter is removed whatever is the string you need to have it and you need to do it for both the you have two strings modified right so let me concatenate it you will understand why soon let me concatenate the two strings two modified strings let me make a new list l by saying l one plus i am concatenating another list i will use a dummy character say star then i concatenate this list l two, why i am creating this concatenate list, you will come to know very soon this is

just one way this is not the only way you can do it in any way this is my way of doing that's it. Its not the, the way of doing it just one way of doing it ok so this is my list and now here i have found a match at some letter so i had removed that letter and i have a new strings and in between the new strings i am using the star as the marker sort of a thing so this person first person name has ended and this is the name of the second person so i am using a marker right? so i will have to return that i will have to return that i have found a matching letter so remove matching letter is the functionality right so i have found the matching letter i have removed it so you have to say that you have to return that value to the call function so i will return a list say inside that list i will pass this concatenated list and i will say true i can pass any values right i can pass numbers, floating point values, characters, bullion values anything i can pass right so i will say i have proved that i have matching letter i have removed it and this is the list you get after removing the matching letter so you are concatenating it so you will run this loop for all the things right the very first time when you find a match you will remove the letter and return this that's it in case you run through the loop completely and you still didn't find the match what happens? It will come to the end of the loop right at this point so in that case you didn't find the matching letter, in that case what should you do? You should return i will say same like that you generate this list this has to be done because this is done inside the loop right in case you came out of the loop this would never be executed and you need to do that so let me copy this line because i want to repeat it again so let me say i have created a concatenated list i will return the concatenated list and i will say false this is the concatenated list but in this two items i haven't found the matching character that is why you are returning false so this is how you do so basically you run through the loop you check for each letter whether this letter is present in the next list anywhere if it is present you remove that matching letter and you return the concatenated list and return true, true stating that there was a matching letter and it was removed if there is no matching letter just you do the same concatenation process return the concatenated list and say false, false stating that there was no matching letters ok so this is how it has been run so we have been returning it so when we have returned it we have returned list right so we need to capture a list so let me say return list is nothing but we are capturing it and we need to do it continuously for some till there is no matching letter so how will i come to know that there is matching letter or there is no matching letter how will we come to know that? So we need to have a flag sort of thing this is what we call as flags n programming that will say whether to continue to proceed with something or you should stop sort of a flag, flag is an indicator for some directions sort of thing right so that indicates that something is present here flag indicate something like that here our flag will indicate whether there is some matching letters still present or should we still proceed or no that's it so there is no matching letter you start counting with the flames part that is the second part of the game, first part is we have to cross out all the matching letters, second part is we have to go in the anticlockwise direction of counting to determine what is the relationship between two people in flames in the word flames right so we will be doing it so the first part is we are removing in the matching letter so the flag will say whether we can proceed towards second part or no we cannot proceed so let me use a flag for that let me say proceed, let me use the same name so that it is easier on mains proceed equal to true initially we have to proceed we have to the first run we must check for matching letters and then only we can we cannot directly start counting right we should check for matching letters

and then only we can start counting so the first run it is always true and as long as proceed is true you keep checking for the matching letters i will have to indent it now ok as long as it says proceed you keep checking so the returned list contains two information one is the concatenated list and the other is whether you can proceed or not, that is one letter has been removed and you can proceed or there is no matching letters there is no need to proceed it returns whether we have to proceed further or not right? so it is returning two information so we have to extract that out from this returned list so concatenated list is what i want to make i want to extract out from the returned list so that is present as the first element of the list, the first element of our list is the concatenated list so i am removing it return list return list of zero, zero is the index by which you access the first element right remember that array the list indexing starts from zero the counting starts from zero please remember this ok so i have taken the concatenated list now the second part of the list is whether should i proceed or not? So it will say i have to proceed is nothing or not so proceed is nothing but is present in the concatenated list second position that is index one so i have taken the concatenated list and proceed and in this concatenated list concatenated list consist of the two names the concatenated and there is a star in between right see that's how we have concatenated we have taken the name we had removed that common letter taken that name appended a star then we had taken the second name right that's how we have it so the star marks is a marker that the first string has completed and after this whatever comes is the second string right so star is a marker so we have to find where is this particular index where this star is present so where is the star present we have to find and at that place we have to slice this list so this is where the list slicing what we had seen come into play so will be slicing the list here so let me say star index star index is nothing but concatenated list on this concatenated list what is the index of the element star that's what i am going to check this is what i am going to call as star index and now i am going to extract out the lists again so l one is the name of the first person in the list format that is present before star right so you have to start from the first index and when you encounter the start you should stop you should not include the star you should include everything before star so what should be the end index? Whatever is the place where star is present right? Please give a minute time here think why am i doing this you will understand if you give some time that's where the logical thinking i don't want the star the functions behaves in such a way that whatever i give as an end index that will be ignored so as i had said i have to give a start index and end index plus one so if you just give end index it will just ignore the end index as well so i have to give plus one so i don't want star i want star to be ignored that's why i will give star index as my end index start index i don't need to give i wanted from the beginning so the default value let it be taken and i will just give the end index so i will do it from concatenate the list we have to perform the slicing operation no need to give the start index because i want to start it from the beginning the default value and i have to ignore the value of the star this index where the star index this point the star is present i want to ignore that point so i will give that as my end index star index is where i want to end so whatever is there still you reach star index whatever is there that will be capture in this list l one ok same like that what should be there in l two, anything after star till the end so till the end i wanted so that's the default value will be taken for end index so i need not give the value of end index but start index i should give, start index wherever i give its starts from there. So should i give star index as my start index? No because if i give star index

as my start index it will say star p r a i y i just want p r i y i just want the name i don't want star here so i should say star index plus one the next place you should start my next slicing so i should say star index plus one is the starting index here star index plus one till the end, end value is taken as the default value is taken so till the end will be considered so two slices have been made. So this is why we had concatenated the list like this is the name we wanted and this is the name we wanted this is just one way or maybe you can pass it as list of three values as well you can think of it, you can pass it as l one comma l two comma true or l one comma l two comma false you can do it that way as well that is why even another way so as i have said there is no just single way by which you can do, you can do it by multiple ways so this is just one way of doing it, now just re through this loop so you had taken the list of characters, you had set some flag like proceed right, you had set it through true initially because you want to check if there is matching letters are not first instance you cannot take a risk of directly going to counting you should check for matching letters so i said proceed with the checking of matching so remove the matching letter so it will loop through the lists, it will loop through both the lists if it find a matching letter it will remove that from the list it will concatenate with the star in between, return the concatenated list and return true if it has found the matching letter and return false otherwise there is no if there is no matching letter it will return false so from this you will understand whether to proceed with next iteration that is we have found with the first iteration ajay and priya let us take the same example A and A it is return so should i continue with checking for another matching letter or can i continue with counting that is return by this proceed so that is extracted the concatenated list from that list we have extracted out and we have extracted the flag proceed so if it says true that is it has found one matching letter there is a possibility that there is another matching letter so we have to proceed it again if it was not represent if there was no matching letter present if you again check it again obviously you won't get matching letter right? so that time you can stop so that is captured in this flag proceed and this is your concatenated list and star was the separating marker in our concatenated list so based on the star index i had sliced the list into two portions and i have my list l one and l two ready for my next iteration i have found my one matching letter and trying to find another matching letter if possible so i will repeat till all matching letters are found. If there is a position where there is no matching letter in that time i will say that ok this is when i have to stop there is no matching letter i have to stop so this is the part one of the game crossing out the matching letters next comes counting in a circular fashion and predicting the relationship in flames. We will see that in the next part of the video.