## **FLAMES 06**

Alright guys, so in the previous part you had seen how we can remove the matching letters and check if we have to proceed with finding matching letters again or we can proceed with the counting of the letters. So we had run it using a loop so i hope you went through this thing you could understand this nippet please spend some time here its just a matter of time if you just spend some time you can easily understand what this is, what are the strategy we are using you can understand it, so ok by here we have we have taken two list we have obtained two list and there is no matching letters between these two lists so now what should we do? We should go with counting, how many letters are left out now? So now there is no matching letters, now we have reached at that position J A and P R I there is no more matching letters now we should start counting. So how will we do that? Will do that will take a variable say count just for counting we are counting how many letters are left out so let me say count it is nothing but length of the list I one and the length of the list I two right? am i right? because J A is the list that is left out to you P R I is the list that is left out to you, the length of the first list is two, the length of the second list is three two plus three is five this is what you want to compute right? so that's what you are doing, so we should declare the result now after going through the flames letters and we should declare the results so let me say that is result let me make use of a list result the first element is flames F, f for friends so let me say friends the next is love I for love f I a, a for affection m, m for marriage, e for enemy and s for siblings right? so this is my result array so among along this i have to if it is five i have to do it one two three four five i am at enemy so i should cut of it i should take the right part then i should take the left part concatenate it that will be my new result and there i have to proceed that's how i have done right, so if you remember you would check through the very first screen cast video of this flames you would understand, you can check through it if you have confused here that's how we generally do will stop at a place will cross out that word and then will take the right part then will take the left part that's how will do that's the trick here, had it been just remove i could have done something like that i would say i can start form friends that's very easier but the trick here is you have to if you had stuck at enemy you have to start from siblings you cannot start from friends that's where the knack here is so there you have to do it and so let me start coding so let me say where should i stop at this so i have to counting i have to keep counting this way one two three four five in that case what if some other names are given? Some ten letters are in common there are just sic flames f l a m e s there are just six items there are ten letters in common, what will you do? You will have to again start your counting of seven from here right from friends you will that is one two three four five six then seven will friends will again be counted as the seven l is eight, a is nine that's how you will count it right, and ten is m that is your fourth element so ten mode six is your four that's your fourth element you want that is as per the humans perception so modularity, modulo operator is that's what we are using here that is we want to again come back to the starting point and count it this is what we call as modular counting, you keep counting if you reach the end you come back to the starting point and resume your counting that's what you will be calling it as modular counting and in our computation it is the fourth element but as per the computer indexing it is one less right computer indexing starts from zero, we start counting from one so it's one less so we have to take care of it so my resulting index where should i

make a split so i am standing at enemy i should make a split the right part and left part i should concatenate it right that's what i have to do right so where should i make a split i should find that index let me call it as split index its easier if i give such a name so split index is nothing but i have to find the count modulo operator i have to use because if i exhaust the list i am coming back to the starting point and counting right so i have to use the modular operator this is called modular counting so i have to count it modulo length of the list my list is result i will find the length that is six count modulo six that is the human index and it differs from computer index by one so i have to subtract one so let me compute this first and from this value i have to subtract one. So by brackets i mean first compute this value count modulo length of the result and then from that resulting value subtract that's why i am giving the bracket so then you put minus one ok this is my split index if my split index is what are the values it can take? It can take, can it take negative values? just think for some time, yes, it can take negative value because of there are six letters in common just count f l a m e s one two three four five six at siblings you will be standing you cut off that part and to the right you have nothing so what will you say the count was six, six mode six it is zero minus one it will say minus one so it will say minus one which is out of the range of the list right so it can take negative values so if it takes positive values you have yo process it in a different way that is if it is struck at middle point it will take a positive value, if it is struck at some of the ends it will take negative value so in that case that is if i am struck at siblings there is no right half right so i should concatenate just the left half so in that case i should process it differently if it is a positive and a negative value so first let us see how to process if it is a positive value then we will see for negative value, let us see if split index is a positive value by positive value what do i mean, it is greater than or equal to zero if that is a positive value what should i do, i have a right half and then i have a left half, right half is nothing but i should start at this, i have to slice the result, result list let's say again here list slicing come into play so i have to slice the right half so this is my split index i have to start at the next point and go till the end so i should say split index split index plus one i have to start at this index and go till the end. Just think for sometime why i am giving this index, because we are on the right half and the next is left half, i want to consider everything except this except this split index so what should i give as a end index? Split index because the end index is by default ignore by the slicing functionality, i want to ignore this thing so i am giving that deliberately so i don't need to give the start index because i want it from the beginning that's the default value will be taken so i want to give the end index as this split index. So at this split index i want to take the left half because right half and left half is available so how should you get the new result? Right half followed by the left half right this will be your new result this is the case you have to do in case of this so the thing you have to do in case you, you are struck up at a point somewhere in the middle then you will get a positive value of split index and you can do this in case you are struck at this point you are getting the negative value of split index in that case what should you do? You should take the left half, so left half is nothing but that would appear only when you are struck at the last value, when you are stuck at the last value, your split index is the last value so in case if there are six common letters you will be stuck at siblings there is no right half that's when you will get an negative index. So in that case what should you do you should just take the right half that is wherever you are stuck that split index must be ignored and the other things may be taken right, so

whatever is the length of the result that particular point that must be the last element must be ignored the other element must be taken whatever is your result the last element at that point must be ignored and other must be taken aright we will do that ok?. so how do we do it? The last element has to be ignored the others has to be taken so i will do the slicing appropriately i will say result is nothing but whatever is in the initial half i don't care i just want to cut half the last element so the last element must be ignored if i just say length of the result what happens, the entire list would be taken but i don't want the last element so i should ignore the length minus one that particular thing has to be taken care of, why do we give minus one? Because i want to ignore the last element so i will give length of my result minus one so the last element is ignored and you got the result right? so this is has to be repeated right? this will be the run for one iteration like that you have to repeat it till your result array is just result array is being sliced right so at every iteration one of the element f l a m e s one of them getting cut so the result array size reduces by one at every instance when the result array becomes of size one you have to stop and say whatever is left out is my result right? so you have to repeat this process so i will use a loop here i will do as long as the length of my result array is greater than one, as long as there are more than one elements you keep counting as long as there are more than one elements you keep counting and you split the array into left and right halves do accordingly you do that, if you get just exactly one element just stop at that position so now when this loop comes to an end what happens? There is just we have put it in a loop so that it gets repeated as long as there is just one element left out in the array and the loop comes to an end what happens? There is just one element present in the array that is your result. So what should i print? I should print, what is there in my result, result it is a list right so it will be printed with square brackets i want to print it without square brackets and there is just one element present that i know so how would i say, result of zero just the first element whatever is the element just print that answer that's what we are doing here ok. ok i ma sorry here is an invalid syntax, i have to give the name of the array right result so i have done that ok so any other place ok yeah this is where i have taken and fine i guess everything is fine ok so now let me run it before that let me restore this view ok here is the console so here we have return the code maybe you can revise here you can take a pause here and revise what happens now will run it, let us run the code yes run alright now let us run the file, let me see it is asking for person one name let me say ajay, person two name it is let me say priya see it has returned friend as the result so like this you can input many names and yes you will it will compute the flames as per the game and you will get the result please do try this as well as if you have some other strategies of doing it please try that too and discuss with us on the discuss form, we will be very happy to help you with the different ways of solving the same thing, its actually interesting the game looks very simple but when you try coding there are different things to be considered like modular counting and you have to consider the right half then the left half, you cannot consider from the first and you cannot consider common letters along the same name it should consider it among the different name, its all like there are some intercases which we can we are doing it very easily by if we do it manually but when you are writing a code there comes a lot of logical thinking so you should practice more of such things and also please do discuss if you have played some other games n your childhood and you try coding it and discuss with us what are you have tried and what all you have played or if you want to try for something also please discuss in the discussion form will

try helping you out with whatever you want to code so literally you can code anything all that is need is some logical thinking that's it. So you explore keep exploring a lot and this is how you can learn keep exploring, keep practicing, alright. Thanks for watching, have a nice day.