SORTING AND SEARCHING – 20 QUESTIONS GAME – 04

Hi guys in last video we saw, we saw that how we can perform binary search on a list of numbers which are sorted. So we saw that the, the list we provided for the function was already sorted which means that numbers where in ascending order one two three four five six seven eight something like that but in real world what happens that whatever you data whatever the data you get is not is not sorted it is actually some random numbers in some random orders and whenever you have to perform such kind of search that let's say binary search and then you have to sort it, so sorting is the algorithm which as a lot of applications so in this program we are going to perform such sorting algorithm known as a bubble sort it is a very easy algorithm i will tell you how to, i will tell you the exact algorithm when you can use the algorithm to write your won program, we will write the program for bubble sort also so let's see this, let me first given an array so let us assume that we have an array of size five and the elements are five one four two eight so what i want? I want to sort the elements of this array it means it should the final array should look like one two five four and eight so bubble sort is like that so in first loop what i will do so i will have two loops exactly so in first iteration what i have to do, i will compare the first two elements and see whether the first element is less than the second element are not, if it is not if the first element is not less than the second element then i will swap their positions so here five is not less than one so i will swap so one should come before five so it will become one five now i will move to the next two elements which are five and four so i will go there i will compare them and see the same thing which is, if five is less than four then it is ok otherwise i will swap them so five is not less than four so i have to swap them so it will become four and five so now i will move to the next two elements which are five two again i will perform the same i will check the same condition so five is not less than two so i will swap them so it become two and five i will move to the next two elements same conditions since five is less than eight so i don't have to swap them so my array my first loop is over, i will go to the second loop and the second iteration in second iteration again i will compare the first two elements so i am doing the same thing so you can find the pattern here, in the first loop inside the first loop i must have another loop in that loop i should do all those things and whenever the second whenever the first iteration of first loop gets over the second instance come i will do the second again do the again perform the same thing so again i will perform compare the first two elements one and four since one is less than four i don't have to swap anything i will move to the second two elements four is not less than two so i have to swap them so two comes before four it becomes two four, i will move to the next two elements four is less than five so i don't have to swap anything now next two elements less than eight i don't have to swap anything so after this my my array is sorted so i need the exactly something like it one two four five eight so now you know the algorithm i give you the simple basic idea of the algorithm i am not writing the pseudo code kind of thing, you will use this idea to write the program it's the very simple program and i think that anyone can write it so we will see in the next video.