

C++ Placement DSA Course

Lecture 1

We will learn about flow charts, pseudocode and programming languages. We will also learn about programming languages and why do we use them. After this, we will write our program. This will be our flow whenever we will solve any problem. First question, then given values, then approach and at last we will code it. Bhaiya explains what is a flowchart is a diagrammatic approach of that approach known as flow chart. The flow chart constitute various components, connected with each other Bhaiyan says. He says that from where a program is starting we have a component called terminator. Terminator is used to show the start and end start of the program. Next block is a simple rectangle, which shows a process. Bhaiya explains how to make a flowchart for the sum of 2 numbers. He says the pseudocode as a whole is a generic way of representing logic. The flow of a flow chart is the same as the flow of the components of the flow chart. We use parallelogram to show the input/output of the program.

We want to make a flowchart for calculating simple interest This is the formula for simple interest You must have studied it in your school We started our program from this start block I do n't know p, r, t , so I need to take them as inputs first So I asked user to give me the values for p, r and t So now I have P, R and T So I made this rectangular block for the calculation part Here I wrote this formula After finding this answer in the above calculation I have to print the output too So here I will print output with this block print SI and then we will end this program We started the program, took a, b as input then we checked whether a is less than b or not. If $a < b$ print " YES " else print " NO " and its done Simple You just have to write in english what you are thinking and it is called pseudocode. If any number has 2 as its factor, then it is even number or ODD number. We have to check a condition that whether N is ODD or EVEN, so we will make one block for this condition Here is the decision making block, Is $N \% 2 = 0$? We will get 2 outputs, YES or NO If output is YES, then it is an EVEN number, so I printed ODD Else, I will print ODD Then I made this end block and ended this program something like this This is the flowchart for EVEN, ODD Got it right ? Bhaiya, why are you putting this inverting commas again and again, you will come to know soon.

We have to print something and then increment too You have to Print and then increase the printed number too You can see here, we printed