

Lecture 3: If-Else, While loop & Lots of Patterns (Part-1)

In this 3rd lecture, we will learn the syntax of conditional statements in CPP. We will make a simple program, where we will ask computer to print A if A is bigger than B, else print B. Coding Ninjas has supported us in providing this free DSA course. If you are given a number A, and you are told that print +ve if A is positive, otherwise, print not +ve. If a block is not executed, then 'else' block will be executed. If A is 5, then 'if A is -2 and if A is -5, then it will print anything. If I enter -5, then it did n't print anything because if block was not executed this time. But if I add a 'else' block here, then this block is executed. `Cin.get()` takes input in the form of characters. It took '1' as a character but we are assigning this value to an integer so that's why it printed ASCII value of that character. `Cin` do n't read SPACE, TAB, ENTER and TAB. But we have another method to take input. Let's code that tells us which number is greater.

`If ( a > 0 ) { print +ve } else { if ( a < 0 ) { print negative }, otherwise print 0 }` Let's run it again. Entered A as 15 It printed A is positive. The time I entered -1. A is negative. Correct output. We solved it using loop using loop to understand loops clearly. You just have to enter condition and the statements which you want to execute. You can check your answer by applying this formula Bhaiya. Here is your homework question. Q1- Find sum of all even numbers from 1 to N. We have to tell whether n is prime or not prime number is a number which has only 1 and N as its factor. We will use this % operator for this question. % tells us remainder when we divide 2 numbers. If any of these numbers gave modules as 0, then N is not prime. If no such number exists, then it is a prime number.

We will run a loop from 1 to n, (for all rows) We declared a variable i to keep the track of the row number and then we are simply printing star in each column. Then we wrote this `cout < endl`, to come to a new line, and after that this code will get executed for every row. We will do many patterns problems in the next video. We will code this triangular figure also in next video. But first let's understand this code. We will run a loop from 1 to n, (for all rows) Then we declared a variable J for columns. J will also run from 1- N and we simply have to print the row number. Then we incremented J inside the column loop and Incrementing i inside the row loop after printing ENTER.