

028 -

C IF ELSE STATEMENTS

The if-else statement in C is used to perform the operations based on some specific condition.

The operations specified in if block are executed if and only if the given condition is true.

There are the following variants of if statement in C language.

- If statement
 - If-else statement
 - If else-if ladder
 - Nested if
-

IF STATEMENT

The if statement is used to check some given condition and perform some operations depending upon the correctness of that condition.

It is mostly used in the scenario where we need to perform the different operations for the different conditions.

IF STATEMENT SYNTAX :-

```
if (expression) {  
    //code to be executed  
}
```

IF-ELSE STATEMENTS

The if-else statement is an extension to the if statement using which, we can perform two different operations, i.e., one is for the correctness of that condition, and the other is for the incorrectness of the condition.

Here, we must notice that if and else block cannot be executed simultaneously.

IF-ELSE STATEMENT SYNTAX :-

```
if (expression) {  
    //code to be executed if condition is true  
} else {  
    //code to be executed if condition is false  
}
```

IF-ELSE-IF LADDER STATEMENTS

The if-else-if ladder statement is an extension to the if-else statement.

It is used in the scenario where there are multiple cases to be performed for different conditions.

In if-else-if ladder statement, if a condition is true then the statements defined in the if block will be executed

Otherwise if some other condition is true then the statements defined in the else-if block will be executed.

At the last if none of the condition is true then the statements defined in the else block will be executed.

IF-ELSE-IF LADDER SYNTAX :-

```
if (condition1) {  
    //code to be executed if condition1 is true  
  
} else if (condition2) {  
    //code to be executed if condition2 is true  
  
} else if (condition3) {  
    //code to be executed if condition3 is true  
  
}  
... else {  
    //code to be executed if all the conditions are false  
}
```
