C - nested if statements

It is always legal in C programming to **nest** if-else statements, which means you can use one if or else if statement inside another if or else if statement(s).

Syntax

The syntax for a **nested if** statement is as follows −

```
if( boolean_expression 1) {

   /* Executes when the boolean expression 1 is true */
   if(boolean_expression 2) {
      /* Executes when the boolean expression 2 is true */
   }
}
```

You can nest **else if...else** in the similar way as you have nested if statements.

Example

```c
#include <stdio.h>                                      Live Demo

int main () {

   /* local variable definition */
   int a = 100;
   int b = 200;

   /* check the boolean condition */
   if( a == 100 ) {

      /* if condition is true then check the following */
```

```c
    if( b == 200 ) {
        /* if condition is true then print the following */
        printf("Value of a is 100 and b is 200\n" );
    }
}

printf("Exact value of a is : %d\n", a );
printf("Exact value of b is : %d\n", b );

return 0;
}
```

When the above code is compiled and executed, it produces the following result −

```
Value of a is 100 and b is 200
Exact value of a is : 100
Exact value of b is : 200
```