LOGICAL OPERATORS IN C

Following table shows all the logical operators supported by C language. Assume variable **A** holds 1 and variable **B** holds 0, then:

Operator	Description	Example
&&	Called Logical AND operator. If both the operands are non-zero, then condition becomes true.	A && B is false.
||	Called Logical OR Operator. If any of the two operands is non-zero, then condition becomes true.	$A \| \| B$ is true.
!	Called Logical NOT Operator. Use to reverses the logical state of its operand. If a condition is true then Logical NOT operator will make false.	! A && B is true.

Example

Try the following example to understand all the logical operators available in C programming language:

```
#include <stdio.h>

main()
{
   int a = 5;
   int b = 20;
   int c ;

   if ( a && b )
   {
      printf("Line 1 - Condition is true\n" );
   }
   if ( a || b )
   {
      printf("Line 2 - Condition is true\n" );
   }
   /* lets change the value of  a and b */
   a = 0;
   b = 10;
   if ( a && b )
   {
      printf("Line 3 - Condition is true\n" );
   }
   else
   {
      printf("Line 3 - Condition is not true\n" );
   }
   if ( !(a && b) )
   {
      printf("Line 4 - Condition is true\n" );
   }
}
```

When you compile and execute the above program it produces the following result:

```
Line 1 - Condition is true
Line 2 - Condition is true
Line 3 - Condition is not true
Line 4 - Condition is true
```