

|| Om Shri Sai ||

LOGICAL OPERATORS

In order to logically represent a condition in a "C" program, "C" Language supports the use of logical operators. Three types of logical operators are supported in "C" Language, they are

- 1) AND Operator (&&)
- 2) OR Operator (||)
- 3) NOT Operator (!)

The AND and the OR operator are used to combine multiple conditions in a single If statement, whereas the NOT operator is used to reverse the status of a condition.

If a condition is true it is replaced by 1 and if a condition is false it is replaced by 0. Similarly, anything non zero is always considered as true whereas zero is always considered as false.

- 1) AND Operator (&&)

When multiple conditions are combined using the AND Operator, if all the specified conditions are true, only then the total condition is considered to be true. i.e. even if a single condition fails the total condition also fails.

&&	0	1
0	0	0
1	0	1

- 2) OR Operator (||)

When multiple conditions are combined using the OR Operator, even if a single condition is true, the total condition is considered as true. i.e. Only if all the conditions fail then the total condition fails.

	0	1
0	0	1
1	1	1



0	0	1
1	1	1

3) NOT Operator (!)

The NOT Operator is placed in front of a condition in an if else statement. NOT reverses the status of the condition. i.e. If the condition is true , NOT makes it false . If the condition is false, NOT makes it true.

!	
0	1
1	0