

Aim:

Write a C program that demonstrates the use of logical operators (**&&**, **||**, **!**) with dynamic input.

Prompt the user to enter two integer values and then use logical operators to determine the following:

- If both numbers are positive or not.
- If at least one number is equal to 5 or not.
- If the first number is not greater than 10 or not.

Input Format:

- The input prompts the user to enter two integers $n1$ and $n2$, separated by a space.

Output format:

- The first line of output prints whether **Both are positive** or **Both are not positive**.
- The second line of output prints: " $\{n1\}$ or $\{n2\} = 5$ " or " $\{n1\}, \{n2\} \neq 5$ ".
- The third line of output prints: " $\{n1\} \leq 10$ " or " $\{n1\} > 10$ "

Note: Refer to sample test cases for better understanding.

Source Code:

logicalOperators.c

```
// Type your content here...
#include<stdio.h>
int main (){
    int n1, n2;

    printf("Enter numbers: ");
    scanf( "%d %d" , &n1, &n2);

    if (n1 > 0 && n2>0)
        printf("Both are positive\n");
    else
        printf("Both are not positive\n");
    if(n1== 5 || n2 ==5)
        printf("%d or %d = 5\n", n1, n2);
    else
        printf("%d,%d != 5\n", n1, n2);
    if (!(n1 > 10))
        printf("%d <= 10\n", n1);
    else
        printf("%d > 10\n", n1);
    return 0;
}
```

Execution Results - All test cases have succeeded!

Test Case - 1

User Output

Both are positive
15,6 != 5
15 > 10

Test Case - 2
User Output
Enter numbers: 5 10
Both are positive
5 or 10 = 5
5 <= 10

Test Case - 3
User Output
Enter numbers: -5 -10
Both are not positive
-5,-10 != 5
-5 <= 10