

Aim:

Write a C program that demonstrates the use of relational operators (`<`, `<=`, `>`, `>=`, `==`, `!=`). Prompt the user to enter two integer values and then use relational operators to compare the numbers and print the results.

Input Format:

- The program prompts the user to enter two integers separated by spaces.

Output Format:

- The program prints "True" or "False" for various comparison operations between the two integers, with each result on a new line.

Note: Refer to the displayed test cases for better understanding of output format.

Source Code:

```
relationalOperators.c
```

```
#include<stdio.h>
int main (){
    int a, b;
    printf("Enter two numbers: ");
    scanf("%d %d", &a,&b);
    printf("%d < %d: %s\n",a,b,(a<b)?"True":"False");
    printf("%d <= %d: %s\n", a , b,(a<=b)? "True": "False");
    printf("%d > %d: %s\n", a ,b,(a>b)? "True": "False");
    printf("%d >= %d: %s\n",a,b, (a>=b)? "True": "False");
    printf("%d == %d: %s\n",a,b,( a==b)? "True": "False");
    printf("%d != %d: %s\n",a,b, (a!=b)? "True": "False");
    return 0;
}
```

Execution Results - All test cases have succeeded!

Test Case - 1

User Output

```
Enter two numbers: 5 10
5 < 10: True
5 <= 10: True
5 > 10: False
5 >= 10: False
5 == 10: False
5 != 10: True
```

Test Case - 2

User Output

```
Enter two numbers: 10 5
```

10 > 5: True
10 >= 5: True
10 == 5: False
10 != 5: True