

2/11/2025

1. Read the integer values perform bit wise operation.

$$a=4, b=2$$

$$a/2$$

$$a \& 2$$

$$a^2$$

$$\sim a$$
 is

; ("integer out value") string

; (a&b, "bx bx") string

; (a+b, "bx bx + ab") string

; (a^b, "bx bx - ab") string

```
#include <stdio.h>
int main()
{
    printf("Enter two integer values:"); //>> 4 2
    scanf("%d %d", &a, &b); //bx bx = 1 << n
    printf("In (a+b) = %.d", a+b); // O ans is
    printf("In (a/b) = %.d", a/b);
    printf("In (a^b) = %.d", a^b); // bug fix
    printf("In (~b) = %.d", ~b); // outputting out value
    return 0;
}
```

Output:

- Enter two integer values : 4 2

- And $(a \& b) = 0$

OR $(a \mid b) = 11441108$

XOR $(a \oplus b) = 11441108$

Not $(\sim a) = -5$

Not $(\sim b) = -11441105$

$$2. \quad a=4, b=2$$

$$a < b : 0$$

$$a > b : 1$$

$$a <= b : 0$$

$$a >= b : 1$$

$$a != b : 1$$

```
#include <stdio.h>
int main()
{
    int a,b;
    printf("Enter two integer values : ");
    scanf("%d %d", &a, &b);
    if(a < b)
        printf("a < b : 0\n");
    else if(a > b)
        printf("a > b : 1\n");
    else if(a == b)
        printf("a = b : 1\n");
    else if(a != b)
        printf("a != b : 1\n");
    return 0;
}
```

Output :-

Enter two integer values : 4,2

Result of relational operations :

$$a < b : 0$$

$$a > b : 1$$

$$a <= b : 0$$

$$a >= b : 1$$

$$a != b : 1$$

Q 3. $a=4, b=2$

$a == 2$

$\Rightarrow \text{#include <stdio.h>}$

int main()

{

int a, b;

printf("Enter two integer values : ");

scanf("%d %d", &a, &b);

If ($a == b$) {

printf("Both numbers are equal.\n");

} else {

printf("Both numbers are not equal.\n");

return 0;

}

Output :-

Enter two integer values : 4, 2

Both numbers are not equal.