

```

/*
name : Durvesh D. Dhake
section: A
roll no: A-48
batch: A-2
*/

// 1. A program for logical operations using bitwise operators
#include <stdio.h>
int main()
{
    // unsigned int a = 60; /* 60 = 0011 1100 */

    // unsigned int b = 13; /* 13 = 0000 1101 */

    int a, b, c = 0;

    printf("Enter the numbers");

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

    c = a & b; /* 12 = 0000 1100 */

    printf("The logical AND of %d and %d is %d\n", a, b, c);
    c = a | b; /* 61 = 0011 1101 */

    printf("The logical OR of %d and %d is %d\n", a, b, c);

    c = a ^ b; /* 49 = 0011 0001 */

    printf("The logical XOR of %d and %d is %d\n", a, b, c);
    c = ~a; /* -61 = 1100 0011 */

    printf("Complement of given number is %d\n", c);

    c = a << 2; /* 240 = 1111 0000 */

    printf("Left shift %d\n", c);
    c = a >> 2; /* 15 = 0000 1111 */

    printf("Right shift %d\n", c);
}

/*
output:
Enter the numbers1
1
The logical AND of 1 and 1 is 1
The logical OR of 1 and 1 is 1
The logical XOR of 1 and 1 is 0
Complement of given number is -2
Left shift 4
Right shift 0*/

```

