

Date :

PRACTICAL-1

Objective – Write a Program to implement various Bitwise logical operation on given numbers.

Code-

```
#include<stdio.h>

int main(){
    int a=25; // binary: 11001
    int b=10; // binary: 01010
    printf("a: %d, b: %d\n",a,b);

    // & – Bitwise AND
    printf("Bitwise AND a&b: %d\n",a&b);

    // | – Bitwise OR
    printf("Bitwise OR a|b: %d\n",a|b);

    // ~ – Bitwise NOT
    printf("Bitwise NOT ~a: %d\n",~a);

    // ^ – XOR
    printf("Bitwise XOR a^b: %d\n",a^b);

    // << – Left Shift
    printf("Left Shift a<<1: %d\n",a<<1);

    // >> – Right Shift
```

```
printf("Right Shift 1>>b: %d\n",b>>1);  
return 0;  
}
```

Output-

```
(base) [rli@rli LAB]$ gcc File1.c -o File1  
(base) [rli@rli LAB]$ ./File1  
  
a: 25, b: 10  
Bitwise AND a&b: 8  
Bitwise OR a|b: 27  
Bitwise NOT ~a: -26  
Bitwise XOR a^b: 19  
Left Shift a<<1: 50  
Right Shift 1>>b: 5  
  
(base) [rli@rli LAB]$ █
```