

1) Read two integer values and perform bitwise operations (&, |, ~, ^, >>, <<).

```
#include < stdio.h >
int main() {
    int a, b;
    // Read two integer values.
    printf ("enter first number :");
    scanf ("%d", &a);
    printf ("enter second number :");
    scanf ("%d", &b);
    // Bitwise operations
    printf ("\n...Bitwise operations Results...\n");
    printf ("a&b = %d\n", a & b);
    printf ("a|b = %d\n", a | b);
    printf ("a^b = %d\n", a ^ b);
    printf ("~a = %d\n", ~a);
    printf ("~b = %d\n", ~b);
    printf ("a>>1 = %d\n", a >> 1);
    printf ("a<<1 = %d\n", a << 1);
    return 0;
}
```

Input:

Enter two integer values : 5 3

Output:

Bitwise	AND (a&b) = 1
Bitwise	OR (a b) = 7
Bitwise	XOR (a^b) = 6
Bitwise	(NOT) (~a) = -6
Bitwise	(NOT) (~b) = -4
Bitwise	(a>>1) = 2
Right shift	
Left shift	(a<<1) = 10

2) MCQs on increment/decrement, left shift/right shift

1) Increment operator

```
#include <stdio.h>
```

```
int main() {
```

```
    int a = 5;
```

```
    a++;
```

```
    printf ("%d", a);
```

```
    return 0;
```

```
}
```

A) 4 B) 5 C) 6 D) 7

Ans: C) 6

2) Decrement operator

```
#include <stdio.h>
```

```
int main() {
```

```
    int a = 5;
```

```
    a--;
```

```
    printf ("%d", a);
```

```
    return 0;
```

```
}
```

A) 6 B) 5 C) 4 D) 3

Ans: C) 4

3) Left shift operator

```
#include <stdio.h>
```

```
int main() {
```

```
    int a = 5;
```

```
    int b = a << 1;
```

```
    printf ("%d", b);
```

```
    return 0;
```

```
}
```

A) 5 B) 8 C) 10 D) 20

Ans: C) 10

Right shift operator

```
#include <stdio.h>
int main() {
    int a = 8;
    int b = a >> 1;
    printf("%d", b);
    return 0;
```

A) 2 B) 3 C) 4 D) 8

Ans: C) 4