

Program 1

//Program to test values of pre & post: increment & decrement.

```
#include<stdio.h>
int main(){
    float x=5.0, b=5.0, a;

    a= ++x + ++b; // a=12 , x=6, b=6
    printf("A = %f\n",a);
    a= ++x - ++b; // a=0 , x=7, b=7
    printf("A = %f\n",a);
    a= ++x * ++b; // a=64, x=8, b=8
    printf("A = %f\n",a);
    a= ++x / ++b; // a=1, x=9, b=9
    printf("A = %f\n",a);

    printf("\n");
    x=5.0, b=5.0;

    a= x++ + ++b; // a=11, x=5, b=6
    printf("A = %f\n",a);
    a= x++ - ++b; // a=-1, x=6, b=7
    printf("A = %f\n",a);
    a= x++ * ++b; // a=56, x=7, b=8
    printf("A = %f\n",a);
    a= x++ / ++b; // a=0.888, x=8, b=9
    printf("A = %f\n",a);

    printf("\n");
    x=5.0, b=5.0;

    a= ++x + b++; // a=11, x=6, b=5
    printf("A = %f\n",a);
    a= ++x - b++; // a=1, x=7, b=6
    printf("A = %f\n",a);
    a= ++x * b++; // a=56, x=8, b=7
    printf("A = %f\n",a);
    a= ++x / b++; // a=1.125, x=9, b=8
    printf("A = %f\n",a);

    printf("\n");
    x=5.0, b=5.0;

    a= x++ + b++; // a=10, x= 5, b=5
    printf("A = %f\n",a);
    a= x++ - b++; // a=0, x=6, b=6
    printf("A = %f\n",a);
    a= x++ * b++; // a=49, x=7, b=7
    printf("A = %f\n",a);
    a= x++ / b++; // a=1, x=8, b=8
    printf("A = %f\n",a);
}
```

```
vipul@whiplash:~/Codes/Practicals/Experiment 4$ ./testprogram_output
A = 12.000000
A = 0.000000
A = 64.000000
A = 1.000000

A = 11.000000
A = -1.000000
A = 56.000000
A = 0.888889

A = 11.000000
A = 1.000000
A = 56.000000
A = 1.125000

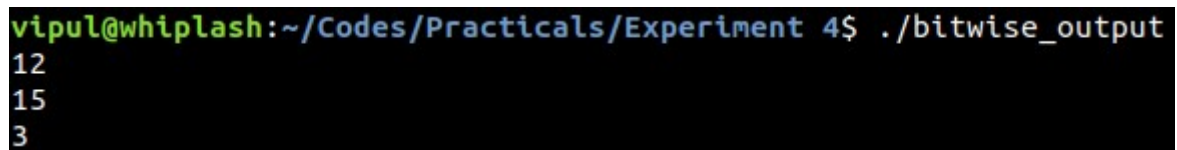
A = 10.000000
A = 0.000000
A = 49.000000
A = 1.000000
```

Program 2

// Program to perform bitwise operations

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

```
int main(){  
    int p,q,r,a=13,b=14;  
    p=a&b;  
    q=a|b;  
    r=a^b;  
    printf("%d\n%d\n%d\n",p,q,r);  
}
```



A terminal window with a black background and green text. The prompt is 'vipul@whiplash:~/Codes/Practicals/Experiment 4\$'. The command './bitwise_output' has been executed, resulting in three lines of output: '12', '15', and '3'.

```
vipul@whiplash:~/Codes/Practicals/Experiment 4$ ./bitwise_output  
12  
15  
3
```

Program 3

//Program to