

Institute of Computer Technology
B. Tech. Computer Science and Engineering
Sub: ESFP – II

Practical -2

AIM: To learn about operators in C++.

1. Calculate the fare for the passengers traveling in a bus. When a Passenger enters the bus, the conductor asks “What distance will you travel?” On knowing distance from the passenger (as an approximate integer), the conductor mentions the fare to the passenger according to following criteria.

Distance (in KMS)	Fare (per KM)
0 – 20	65 paisa
21 – 40	75 paisa
41 – 60	78 paisa
61 – 80	80 paisa
81 – 100	95 paisa
101 and above	1.05 paisa

2. Use suitable code to produce the output as shown below:

x value	y value	expressions	results
10	5	x=y+3	x=8
10	5	x=y-2	x=3
10	5	x=y*5	x=25
10	5	x=x/y	x=2
10	5	x=x%y	x=0

3. Prompt the user to input the integral value of a and print out the result as shown below:

The value of a is: 35

.....

The value of ++a is: 36

Now the value of a is: 36

The value of a++ is: 36

Now the value of a is: 37

The value of --a is:36

Now the value of a is:36

The value of a-- is: 36

Now the value of a is: 35

4. Given the following pseudo code, write a c++ code that executes it.
 - a. read x
 - b. read y
 - c. compute $p=x*y$
 - d. compute $s=x+y$
 - e. $total=s^2+p*(s-x)*(p+y)$
 - f. print total

Post Practical Questions:

Write output of given programs:

1.

```
#include <stdio.h>
using namespace std;
int main()
{
    int a = 21;
    int c ;
    c = a++;
    cout << c;
    return 0;
}
```
2.

```
#include <stdio.h>
using namespace std;
int main()
{
    int x = 5, y = 5;
    cout << ++x << --y << endl;
    return 0;
}
```
3.

```
#include <stdio.h>
using namespace std;
int main()
{
    int num1 = 5;
    int num2 = 3;
    int num3 = 2;
    num1 = num2++;
    num2 = --num3;
    cout << num1 << num2 << num3;
    return 0;
}
```