

**Institute of Computer Technology**  
**B. Tech. Computer Science and Engineering**

**Sub : ESFP – II**

**Practical -6**

**AIM: To learn about operator overloading & function overloading in C++.**

1. Create a class that contains a single private char. Overload the iostream operators << and >> and test them. You can test them with string streams, and cin and cout.
2. Is it possible to apply Overloading mechanism on binary minus operator - using friend function.? If yes, then write suitable code.
3. Implement following functions in single C++ Program:

void display();

void display( int );

void display( float );

void display( int, float );

**Post Practical Task**

1. Create two classes, Apple and Orange. In Apple, create a constructor that takes an Orange as an argument. Create a function that takes an Apple and call that function with an Orange to show that it works. Now make the Apple constructor explicit to demonstrate that the automatic type conversion is thus prevented. Modify the call to your function so that the conversion is made explicitly and thus succeeds.

2.

```
#include <iostream>
```

```
using namespace std;
```

```
int fun()
```

```
{
```

```
    return 1;
```

```
}
```

```
float fun()
```

```
{
```

```
    return 10.23;
}
void main()
{
    cout <<(int)fun() << ' ';
    cout << (float)fun() << ' ';
}
```

3.

```
#include <iostream>
using namespace std;
int gValue=10;
void extra()
{
    cout << gValue << ' ';
}
void main()
{
    extra();
    {
        int gValue = 20;
        cout << gValue << ' ';
        cout << : gValue << ' ';
    }
}
```