Institute of Computer Technology

B. Tech. Computer Science and Engineering

Sub: ESFP – II

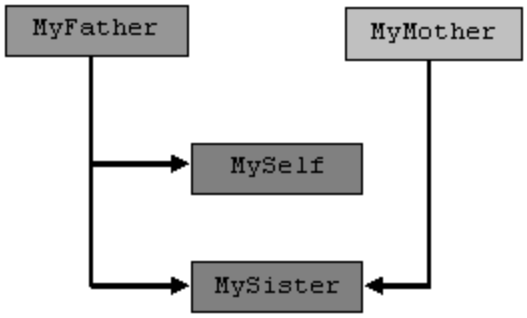
Practical -7

AIM: To learn about Inheritance in C++.

1. Implement a class government having two subclasses finance and defense. Now make a child Minister which should have finance and defense as parent class. Classes Government must possess a function Budget which display the message you will get budget less than 4000 crores. Make the object of Minister and access the function budget.

2. Create two classes, A and B, with default constructors that announce themselves. Inherit a new class called C from A, and create a member object of B in C, but do not create a constructor for C. Create an object of class C and observe the results.

3. Implement a following scenario using C++ Inheritance: (Use Name & Eye color Data member to print the results)



Post Practical Work

1. Write a Program in C++ to illustrate the order of execution of constructors and destructors in inheritance.

2.

```
#include <iostream>;
using namespace std;
class  Info
```

```
{
     char* name;
     int Number;
public:
     void getInfo()
     {
          cout << "Info::getInfo";
          getName();
     }

      void getName()
      {
           cout << "Info::getName";
      }
};

class Name: public Info
{
         char *name;
public:
        void getName()
      {
               cout << "Name::getName";
      }
};
void main()
{
    Info *P;
    Name n;
    P = n;
    p->getInfo();
}
```

3.Find the output:

```
 #include<iostream>
using namespace std;

class base {
   int arr[10];
};

class b1: public base { };

class b2: public base { };
```

```
class derived: public b1, public b2 {};

int main(void)
{
  cout << sizeof(derived);
  return 0;
}
```

A.40
B.80
C. 0
D. 4