

Write three derived classes inheriting functionality of base class person (should have a member function that asks to enter name and age) and with added unique features

of student, and employee, and functionality to assign, change and delete records of student and employee. And make one member function for printing address of the objects of classes (base and derived) using this pointer. Create two objects of base class and derived classes each and print the addresses of individual objects. Using calculator, calculate the address space occupied by each object and verify this with address spaces printed by the program.

```
#include<iostream>
using namespace std;
class Person
{
    string name;
    int age;
public:
    void display()
    {
        cout<<"The address of the object in person class is: "<<this<<endl;
        cout<<"The size of the object in person class is: "<<sizeof(this)<<endl;
    }
};
class Student:public Person
{
    int roll_no;
    int grade;
public:
    void display()
    {
        cout<<"The address of the object in student class is: "<<this<<endl;
        cout<<"The size of the object in student class is: "<<sizeof(this)<<endl;
    }
};
class Employee:public Person
{
    int employee_id;
    float salary;
public:
    void display()
```

```
{
    cout<<"The address of the object in employee class is: "<<this<<endl;
    cout<<"The size of the object in employee class is: "<<sizeof(this)<<endl;
}
};
int main()
{
    Person pobj1,pobj2;
    Student sobj1,sobj2;
    Employee eobj1,eobj2;
    pobj1.display();
    pobj2.display();
    sobj1.display();
    sobj2.display();
    eobj1.display();
    eobj2.display();
    return 0;
}
```