# OOP-LAB Task 6

**Roll No: 24P-0706** **Dept: BS-CS**

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QNS-1:

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

class university{
   public:
   string name_university;
   university(string name):name_university(name){};
};
class department: public university{
   public:
   string dept_name;
   department(string n,string d): dept_name(d),university(n){
   };

};

class staff{
   public:
   int staff_id;
   staff(int id):staff_id(id){}
};
```

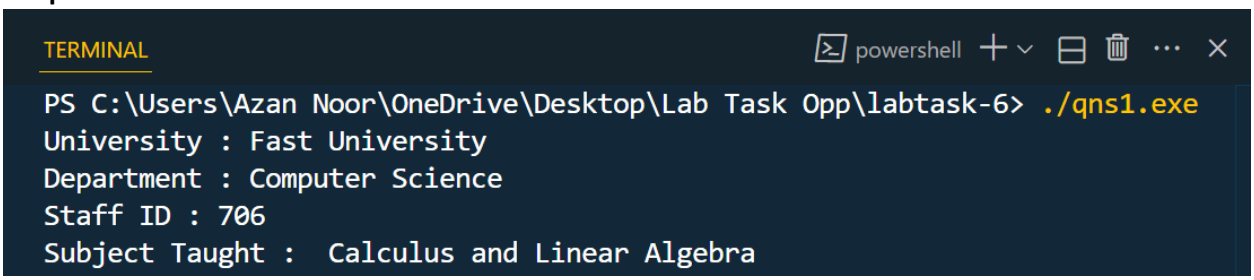
```
class professor : public department , public staff{
   public:
   string subj_taught;
   professor(string n_u , string d_u, int s_id, string s_t): department(n_u , d_u), staff(s_id) , subj_taught(s_t){};

   void display_info()
   {
      cout <<"University : "<<name_university<<"\nDepartment : "<<dept_name<<"\nStaff ID : "<<staff_id<<"\nSubject Taught : "<<subj_taught<<endl;
   }
};

int main()
{
   professor p1("Fast University" , "Computer Science ",706, " Calculus and Linear Algebra ");
   p1.display_info();

   return 0;
}
```

**Output:**



QNS-2:

**Code:**

```
#include<iostream>
using namespace std;
class person{
   public:
   string name;
   int age;
   person(string n , int a):name(n),age(a){};
};
class marks{
   public:
   float math_marks;
   float science_marks;
   marks(float a, float b):math_marks(a),science_marks(b){};
};

class student : public person,public marks{
   public:
   student (string n, int a, float math,float science ): person(n,a),marks(math,science){};

   float calculate()
   {
      float sum=math_marks+science_marks;
      float avg=sum/2;
      return avg;
   }

   void display()
```

```
    {
        cout <<"Person Name : "<<name<<"\nPerson Age : "<<age<<"\nPerson Average Marks : "<<
calculate()<<endl;
    }
};

int main()
{
    student s1("Aazan Noor Khuwaja",17,64,70);
    s1.display();
    return 0;
}
```

**Output:**