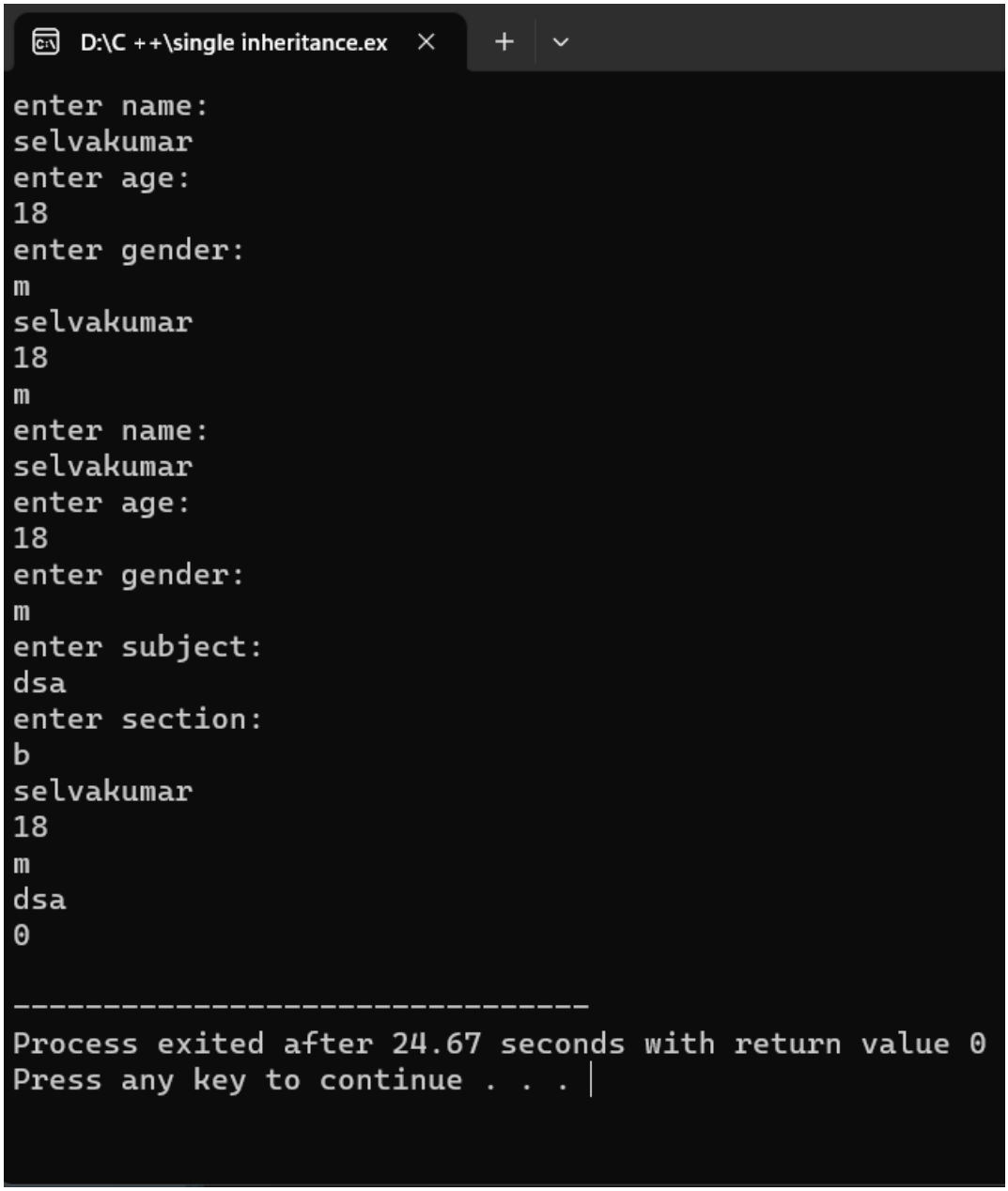
Assignment 3

SINGLE INHERITANCE

```
#include<iostream>
#include<string>
using namespace std;
class student
{
	public:
		string name;
		int age;
		char gender;
	void go()
	{
		cout<<"enter name:"<<endl;
		cin>>name;
		cout<<"enter age:"<<endl;
		cin>>age;
		cout<<"enter gender:"<<endl;
		cin>>gender;
	}
	void display()
```

```
	{
		cout<<name<<endl;
		cout<<age<<endl;
		cout<<gender<<endl;
	}

};
class teacher: public student
{
	public:
		string subject;
		int section;
	void get()
	{
		cout<<"enter name:"<<endl;
		cin>>name;
		cout<<"enter age:"<<endl;
		cin>>age;
		cout<<"enter gender:"<<endl;
		cin>>gender;
		cout<<"enter subject:"<<endl;
		cin>>subject;
		cout<<"enter section:"<<endl;
		cin>>section;
	}
	void display1()
	{
```

```
            cout<<name<<endl;
            cout<<age<<endl;
            cout<<gender<<endl;
            cout<<subject<<endl;
            cout<<section<<endl;
        }

};

int main()
{
        student S;
        S.go();
        S.display();
        teacher T;
        T.get();
        T.display1();

}
```



MULTILEVEL INHERITANCE

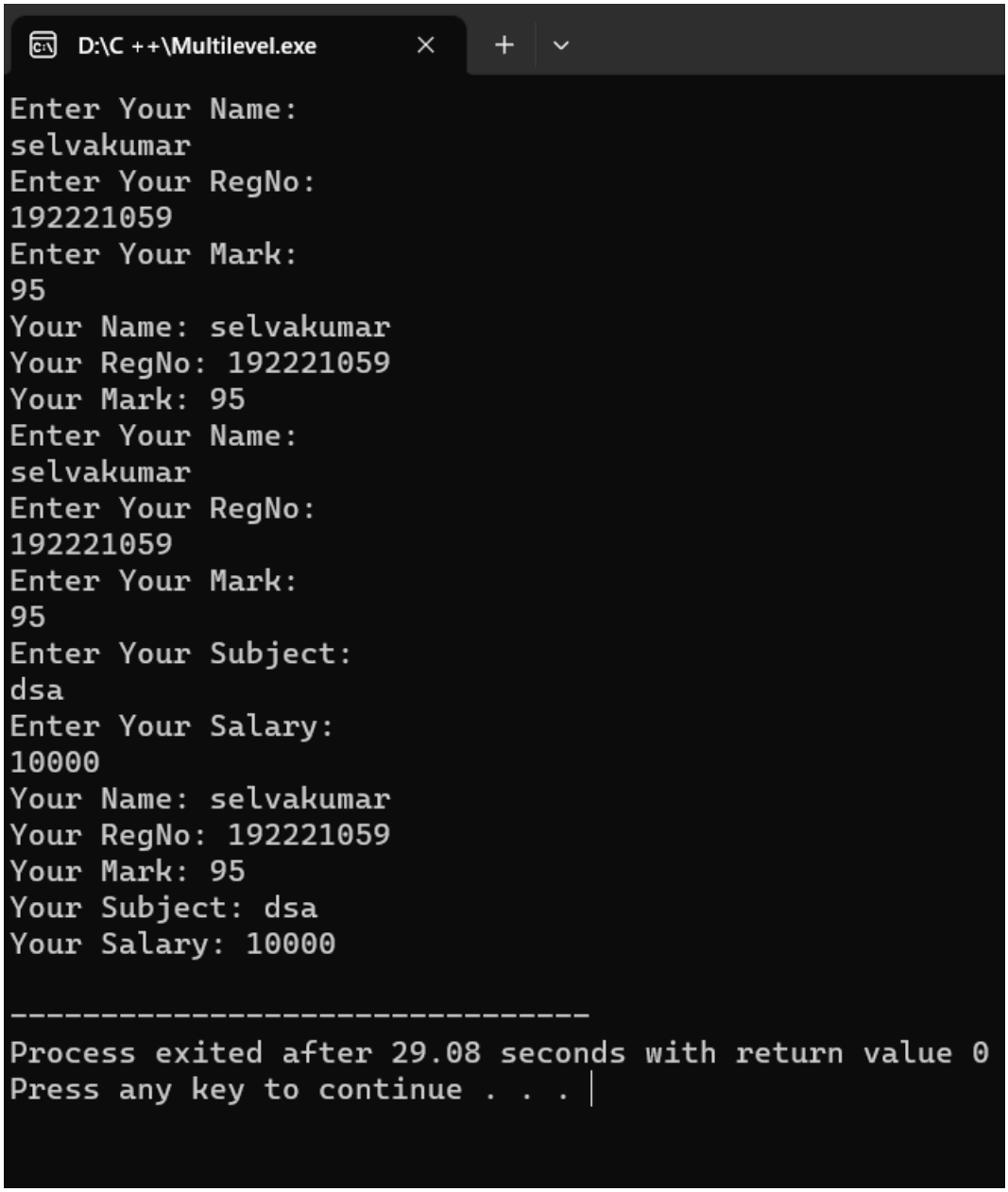
```
#include <iostream>

using namespace std;
```

```
class Person
{
	public:

	char name[50];
	int reg_no;

	void get()
	{
		cout<<"Enter Your Name: \n";
		cin>>name;

		cout<<"Enter Your RegNo: \n";
		cin>>reg_no;
	}

	void display()
	{
		cout<<"Your Name: "<<name<<endl;
		cout<<"Your RegNo: "<<reg_no<<endl;
	}
};

class Student:public Person
{
	public:
```

```
    char name[50];
        int reg_no,marks;

        void put()
        {
          cout<<"Enter Your Name: \n";
          cin>>name;

          cout<<"Enter Your RegNo: \n";
          cin>>reg_no;

          cout<<"Enter Your Mark: \n";
          cin>>marks;
        }

        void dis()
        {
           cout<<"Your Name: "<<name<<endl;
                cout<<"Your RegNo: "<<reg_no<<endl;
                cout<<"Your Mark: "<<marks<<endl;
        }
};

class Teacher: public Student
{
        public:
```

```
int salary;
char subject[50];

void met()
{
  cout<<"Enter Your Name: \n";
  cin>>name;

  cout<<"Enter Your RegNo: \n";
  cin>>reg_no;

  cout<<"Enter Your Mark: \n";
  cin>>marks;

  cout<<"Enter Your Subject: \n";
  cin>>subject;

  cout<<"Enter Your Salary: \n";
  cin>>salary;
}

void play()
{
        cout<<"Your Name: "<<name<<endl;
        cout<<"Your RegNo: "<<reg_no<<endl;
        cout<<"Your Mark: "<<marks<<endl;
        cout<<"Your Subject: "<<subject<<endl;
```

```
            cout<<"Your Salary: "<<salary<<endl;
        }
};

int main()
{
        Student s;
        s.put();
        s.dis();

        Teacher t;
        t.met();
        t.play();
}
```



MULTIPLE INHERITANCE

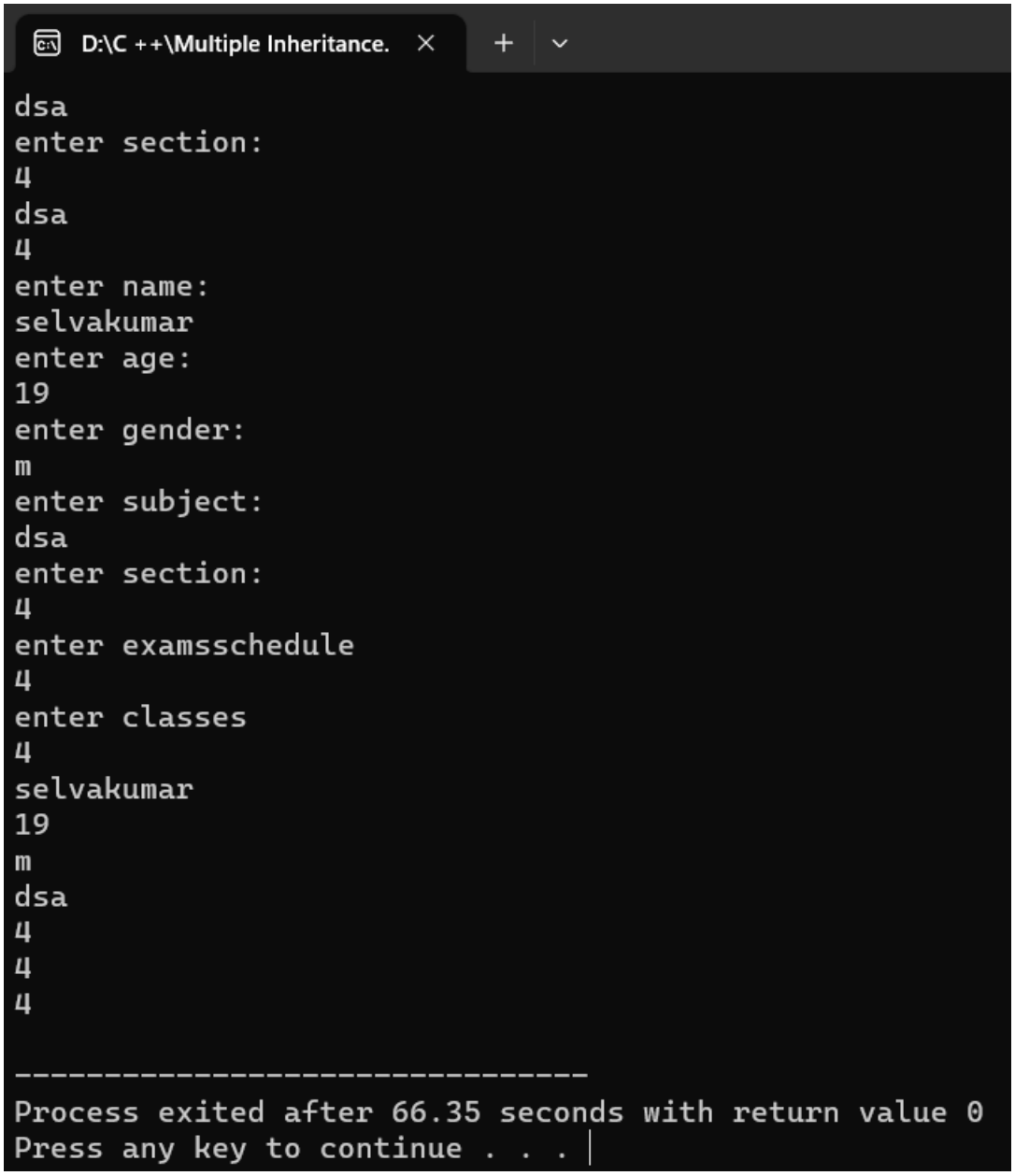
```
#include<iostream>
#include<string>
using namespace std;
class student
```

```
{
        public:
                string name;
                int age;
                char gender;
        void go()
        {
                cout<<"enter name:"<<endl;
                cin>>name;
                cout<<"enter age:"<<endl;
                cin>>age;
                cout<<"enter gender:"<<endl;
                cin>>gender;
        }
        void display()
        {
                cout<<name<<endl;
                cout<<age<<endl;
                cout<<gender<<endl;
        }

};
class teacher
{
        public:
                string subject;
                int section;
```

```
        void get()
        {
                cout<<"enter subject:"<<endl;
                cin>>subject;
                cout<<"enter section:"<<endl;
                cin>>section;
        }
        void display1()
        {
                cout<<subject<<endl;
                cout<<section<<endl;
        }

};
class dean: public student,public teacher
{
        public:
                string  examsschedule;
                int  classes;
        void set()
        {
           cout<<"enter name:"<<endl;
                cin>>name;
                cout<<"enter age:"<<endl;
                cin>>age;
                cout<<"enter gender:"<<endl;
                cin>>gender;
```

```
            cout<<"enter subject:"<<endl;
            cin>>subject;
            cout<<"enter section:"<<endl;
            cin>>section;
            cout<<"enter examsschedule"<<endl;
            cin>>examsschedule;
            cout<<"enter classes"<<endl;
            cin>>classes;
        }
        void display2()
        {
            cout<<name<<endl;
            cout<<age<<endl;
            cout<<gender<<endl;
            cout<<subject<<endl;
            cout<<section<<endl;
            cout<<examsschedule<<endl;
            cout<<classes<<endl;

        }


};
int main()
{
        student S1;
        S1.go();
```

```
        S1.display();
        teacher T1;
        T1.get();
        T1.display1();
        dean D1;
        D1.set();
        D1.display2();

}
```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enter section:
4
dsa
4
enter name:
selvakumar
enter age:
19
enter gender:
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enter examsschedule
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enter classes
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selvakumar
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4

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