Assignment: Namespace

```
#include<iostream>
using namespace std;
namespace SY{
	class SYMARKS{
   double	computer_total;
   double mathstotal;
	double  electronicstotal;
	public:
	SYMARKS(){
		this->computer_total=0;
		this->mathstotal=0;
		this->electronicstotal=0;
	}
	void display(){
		cout<<this->computer_total<<endl;
		cout<<this->mathstotal<<endl;
		cout<<this->electronicstotal<<endl;
	}
	SYMARKS(double a,double b,double c){
		this->computer_total=a;
		this->mathstotal=b;
		this->electronicstotal=c;
	}
	void setcomputertotal(double a){
		this->computer_total=a;
	}
	void setmathstotal(double a){
		this->mathstotal=a;
	}
```

```
		void setelsectronictotal(double a){
			this->electronicstotal=a;
		}
		double getelsectronictotal(){
			return this->electronicstotal;
		}
		double getmathtotal(){
			return this->mathstotal;
		}
		double getcompputertotal(){
			return this->electronicstotal;
		}
		};//Sy marks end here
}
namespace TY{
		class TYMarks {
			double theory;
	double Practical;
	public:
	TYMarks(){
		this->theory=0;
		this->Practical=0;
			}
			TYMarks(double a,double b){
		this->theory=a;
		this->Practical=b;
			}
			void settheory(double a){
				this->theory=a;
			}
			void setpractical(double b){
```

```
                this->Practical=b;
        }
        double gettheory(){
                return this->theory;
        }
        double getpractical(){
                return this->Practical;
        }
    };
}
using namespace SY;
using namespace TY;
class Student {
    int rollno;
    char name[30];
   SY::SYMARKS sym;
   TY::TYMarks tym;
   public :
   Student(){
    this->rollno=0;
    strcpy(this->name,"not given");
    this->sym.setcomputertotal(0);
    this->sym.setelsectronictotal(0);
    this->sym.setmathstotal(0);
    this->tym.settheory(0);
    this->tym.settheory(0);
    }
    Student(int rollno,char*name,SYMARKS sy,TYMarks ty){
    this->rollno=rollno;
    strcpy(this->name,name);
    this->sym.setcomputertotal(sy.getcompputertotal());
```

```
this->sym.setmathstotal(sy.getmathtotal());
this->sym.setelsectronictotal(sy.getmathtotal());
this->tym.setpractical(ty.gettheory());
this->tym.settheory(ty.gettheory());

}
double calmark(){
 double totalmark=this->sym.getcompputertotal()+(this->tym.gettheory()+this->tym.getpractical());
 return totalmark;
}
// double totalmark=this->sym.getcompputertotal()+(this->tym.gettheory()+this->tym.getpractical());
 void Result(){

 if(calmark()>=70){
        cout<<"Gread A "<<endl;
 }
 else if(calmark()>=60){
        cout<<"Gread B"<<endl;
 }
  else if(calmark()>=50){
        cout<<"Gread C"<<endl;
 }
  else if(calmark()>=40){
        cout<<"Pass"<<endl;
 }
 else {
        cout<<"Fail"<<endl;
 }

}
```

```
        void display(){
                cout<<"Roll No = "<<this->rollno<<endl;
                cout<<"Name is = "<<this->name<<endl;
                cout<<"Computer Total = "<<this->sym.getcompputertotal()<<endl;
                cout<<"Math Total Mark = "<<this->sym.getmathtotal()<<endl;
                cout<<"Electronics Total Marks "<<this->sym.getelsectronictotal()<<endl;
                cout<<"Theory Marks = "<<this->tym.gettheory()<<endl;
                cout<<"Practical Marks = "<<this->tym.getpractical()<<endl;
                //cout<<"Gread = ";
                //this->Result();
        }
};
int main(){
        SYMARKS S(90,78,56);
        TYMarks T(30,56);
        Student S1(1,"Ashutosh Shleke",S,T);
        S1.display();
        cout<<"Result is = ";
        S1.Result();



}
```