Assignment 04 - OOP

Exercise 01

Details of the student class is given below.

Class: Student
Data members: regNo name marks[3] grades[3] avg
Methods: setDetails(int,string) setMarks(float,float,float) calcAvg() findGrades() printDetails()

Class student has the marks obtained by a student for the three modules. The marks should be stored in the array mark. Implement the class with the given private data members and the member.

1. `setDetails()` method should be implemented with input parameters to assign regNo and name of each student object.
2. `setMarks()` member function stores the three marks given as parameters in the marks array.
3. calcAvg() member function calculate returns the average mark of the modules back to the main.
4. `findGrades()` member function finds and stores the grade of the 3 subjects in the grades array (You may use the grading criterion given in earlier Labs/Example Questions sets)

5. `printDetails ()` member prints all the details of the student. Additionally it should print whether the student is pass/fail status for each subject. (You may use the grading criterion given in earlier Labs/Example Questions sets)
6. Create two student objects and assign the marks for the three modules. Calculate the Average mark and display the details using the member functions implemented.

Exercise 02

Details of the Length class is given below,

Class: Length

Data members:
 	
`int feet;`
`int inches;`

Methods:
 	
`void setValues(int, int);`
`void Add(Length);`
`void Sub(Length);`
`void Print();`

An object created from Length class should be able to store a length given in feets and inches. Implement the Length class as instructions below.

1. `void setValues(int, int)` method should take the feet and inches of a length and assign into `feet and inches` data members respectively.
2. `void Add(Length)` should take a length object as the parameter and add its Feet and Inches values to the current Feet Object
3. `void Sub(Length)` should take a length object as the parameter and add its Feet and Inches values to the current Feet Object
4. `void Print() should print the feet and inches value of the current Length object`

Note : 1 feet = 12 inches