

ICS 102 - Introduction to Computing
Fall Semester 053
Homework # 3

Solve the following problems:

1. Design and implement the Money class problem discussed in Problem Solving 4.

2. Write a Student class that has:

- The instance variables: **id**, **name**, and **grades** of 4 quizzes.
- A class variable called **numberOFStudents**, which is a counter of the number of students.
- A class variable called **sum**, which is the sum of all the grades of all the students.
- Appropriate constructors.
- Three accessor methods.
- The methods **maxGrade**, **minGrade**, and **averageGrade** that respectively return the maximum, minimum, and the average of the 4 quiz grades.
- A mutator method to modify the grade of a particular quiz.
- An equals method which compares if the average grade of two students are equal.
- A method which returns the number of students.
- A Boolean method called **isAboveAverage** which returns true if the average of the students is above the overall average otherwise it returns false.
- A **toString** method that returns a string of
 - Id
 - Name
 - The grades of all the 4 quizzes

3. Write a proper driver class to test the above two classes.