

Lab Goal : This lab was designed to teach you more about arrays of references.

Lab Description : You will create a Grades class to store grades. Then, you will create a Student class to store student name and grade information. Also, you will create a Class class to store class information. A Class will contain an array of Student and a class name.

Class Class :

```
public class Class
{
    private String name;
    private Student[] studentList;

    //constructors

    public void addStudent(int stuNum, Student s){

    }

    public String getClassname(){
        return "";
    }

    public double getClassAverage(){
        return 0.0;
    }

    public double getStudentAverage(int stuNum){
        return 0.0;
    }

    public double getStudentAverage(String stuName){
        return 0.0;
    }

    public String getStudentName(int stuNum){
        return "";
    }

    public String getStudentWithHighestAverage(){
        return "";
    }

    public String getStudentWithLowestAverage(){
        return "";
    }

    public String getFailureList(double failingGrade){
        return "";
    }
    //toString
}
```

Files Needed ::

Grades.java
GradesTester.java
Student.java
StudentTester.java
Class.java
ClassTester.java

Sample Input(ClassTester.java) :

See the main of ClassTester.java.

Sample Output :

```
Comp Sci 1
Jimmy = 100.0 90.0 80.0 60.0      82.50
Sandy = 100.0 100.0 80.0 70.0     87.50
Fred = 50.0 50.0 70.0 68.0       59.50
Jimmy's average = 82.50
Sandy's average = 87.50
Fred's average 59.50
Sandy's average 87.50
Failure List = Fred
Highest Average = Sandy
Lowest Average = Fred
Class Average = 76.50
```