Isaac Ray Shoebottom CS 1073 (FR02A) Assignment 2 3429069

Section A:

Output:

```
course1: CS1073 offered Fall 2020 Students: 0
     course2: CS1083 offered Winter 2021 Students: 0
     course3: MATH1013 offered Summer 2021 Students: 0
Section B
Updated Source Code Of Course.java:
     /**
     This class represents a Course.
     @author Leah Bidlake
     @author Isaac Shoebottom (3429069)
*/
public class Course{
     //Instance variables:
    //For each Course object, store its name, semester, year, and the
    //number of students enrolled in the course so far.
     private final String name;
     private final String semester;
     private final String instructor;
     private final int year;
     private int students;
```

```
//The constructor creates a new Course object and initializes the
    //instance variables.
     public Course(String nameIn, String semesterIn, String
instructorIn, int yearIn) {
           this.name = nameIn;
           this.semester = semesterIn;
           this.instructor = instructorIn;
          this.year = yearIn;
           this.students = 0; //no students have been added to the
course
     }
     //This is a method that we can call on a Course object
    //(Specifically, it is an accessor method). This method
    //creates and returns a String containing all the information
    //about the state of the object.
    public String Output(){ //Maybe don't overwrite the base "toString
method???"
          return name + " offered " + semester + " " + year + ".
Taught By: " + instructor + ". Students: " + students;
     }
     public void addStudents(int students) {
          this.students += students;
     }
}
```

Section C

```
Updated source code for CourseDriver.java:
```

```
/**
     This is an example of a driver class; its purpose
     is to try out the Course class.
     @author Leah Bidlake
     @author Isaac Shoebottom (3429069)
*/
public class CourseDriver{
     public static void main(String[] args){
     //Create some Course objects
     Course course1 = new Course("CS1073", "Fall", "Mr. Don
Clement", 2020);
     Course course2 = new Course("CS1083", "Winter", "Dr. Harvey
Ingrid",2021);
     Course course3 = new Course("MATH1013", "Summer", "Mrs. Lee
Smith" ,2021);
     Course course4 = new Course ("ENG1104", "Fall", "Ms. Kate Free",
2022);
     /* Add the appropriate statements to record the fact that 23
students have
     been added to CS1073, 17 students have been added to CS1083, and
31
     students have been added to MATH1013. Then, provide another
     statement to record the fact that 14 more students have been
added to
     CS1073. Position these four statements after the objects are
created and
```

```
before they are printed out. */
course1.addStudents(23);
course2.addStudents(17);
course3.addStudents(31);
course1.addStudents(14);
System.out.println("23 students have been added to CS1073");
System.out.println("17 students have been added to CS1083");
System.out.println("31 students have been added to MATH1013");
System.out.println("14 students have been added to CS1073");
//Now I can print out my courses to confirm they
//were created properly
System.out.println("course1: " + course1.Output());
System.out.println("course2: " + course2.Output());
System.out.println("course3: " + course3.Output());
System.out.println("course4: " + course4.Output());
}
```

}

Section D

Sample Output of my edited code:

```
23 students have been added to CS1073

17 students have been added to CS1083

31 students have been added to MATH1013

14 students have been added to CS1073

course1: CS1073 offered Fall 2020. Taught By: Mr. Don Clement. Students: 37

course2: CS1083 offered Winter 2021. Taught By: Dr. Harvey Ingrid. Students: 17

course3: MATH1013 offered Summer 2021. Taught By: Mrs. Lee Smith. Students: 31

course4: ENG1104 offered Fall 2022. Taught By: Ms. Kate Free. Students: 0
```