

CS1073
Lab #2
Section: FR03B

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Question I:

Output:

```
course1: CS1073 offered Fall 2020 Students: 0
course2: CS1083 offered Winter 2021 Students: 0
course3: MATH1013 offered Summer 2021 Students: 0
```

Question II:

```
/**
This class represents a Course.
@author Leah Bidlake
@author Daniyal Khan 3765942
*/

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 String name;
    private String semester;
    private int year;
    private int students;
    private String instructor;

    //The constructor creates a new Course object and initializes
the
    //instance variables.
    public Course(String nameIn, String semesterIn, int yearIn,
String instructorName){
        name = nameIn;
        semester = semesterIn;
        year = yearIn;
        students = 0; //no students have been added to the course
        instructor = instructorName;
    }
}
```

```

        //This is a method we can call to increase the number of
students in the course by some amount
        public void addStudent(int studentNum) {
            students += studentNum;
        }

        //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 toString(){
            return name +
                " offered " + semester +
                " " + year +
                " Students: " + students +
                " Instructor: " + instructor;
        }
    }
}

```

Question III:

```

/**
This is an example of a driver class; its purpose
is to try out the Course class.
@author Leah Bidlake
@author Daniyal Khan 3765942
*/

public class CourseDriver{

    public static void main(String[] args){

        //Create some Course objects
        Course course1 = new Course("CS1073", "Fall", 2020, "Leah
Bidlake");
        Course course2 = new Course("CS1083", "Winter", 2021, "Leah
Bidlake");
        Course course3 = new Course("MATH1013", "Summer", 2021, "Justine
Gauthier");
        Course course4 = new Course("MATH1503", "Winter", 2024, "Mahin
Salmani");
    }
}

```

```
// Adding students to the courses
course1.addStudent(23);
course2.addStudent(17);
course3.addStudent(31);
course4.addStudent(4);

//Now I can print out my courses to confirm they
//were created properly
System.out.println("course1: " + course1.toString());
System.out.println("course2: " + course2.toString());
System.out.println("course3: " + course3.toString());
System.out.println("course4: " + course4.toString());

}

}
```

Question IV:

Output:

```
course1: CS1073 offered Fall 2020 Students: 23 Instructor: Leah
Bidlake
course2: CS1083 offered Winter 2021 Students: 17 Instructor: Leah
Bidlake
course3: MATH1013 offered Summer 2021 Students: 31 Instructor:
Justine Gauthier
course4: MATH1503 offered Winter 2024 Students: 4 Instructor: Mahin
Salmani
```