Deadline: 4/3/2025

All questions are mapped to CLO1

Q1. Rewrite the following code using object-oriented approach.

```
import java.util.Scanner;
public class StudentGradeCalculator {
  public static void main(String[] args) {
    Scanner input = new Scanner(System.in);
    // Student 1 details
    String s1_name = null;
    int s1_marks = 0;
    // Student 2 details
    String s2_name = null;
    int s2_marks = 0;
    // Input for Student 1
    System.out.println("Enter the details of Student 1");
    System.out.print("Enter Name: ");
    s1 name = input.next();
    System.out.print("Enter Marks: ");
    s1 marks = input.nextInt();
    // Input for Student 2
    System.out.println("Enter the details of Student 2");
    System.out.print("Enter Name: ");
    s2 name = input.next();
    System.out.print("Enter Marks: ");
    s2_marks = input.nextInt();
    // Output results
    System.out.println("Name: " + s1_name + "\tGrade: " + calculateGrade(s1_marks));
    System.out.println("\t\t\****\t\t\t");
    System.out.println("Name: " + s2_name + "\tGrade: " + calculateGrade(s2_marks));
    System.out.println("\t\t\t***\t\t\t");
```

```
public static String calculateGrade(int marks) {
    if (marks >= 90) {
        return "A";
    } else if (marks >= 80) {
        return "B";
    } else if (marks >= 70) {
        return "C";
    } else if (marks >= 60) {
        return "D";
    } else {
        return "F";
    }
}
```

Q2. Consider a class DateSixthTry. Would it be legal to add two method definitions with the following two method headings to the class DateSixthTry?

```
public void setMonth( int newMonth)
public void setMonth(String newMonth)
```

Q3. Suppose you have defined a class such as the following for use in a program: