1.Design a TestScores class that has fields to hold three test scores. The class should have a constructor, getter and setter methods for the test score fields, and a method that returns the average of the test scores. Demonstrate the class by writing a separate class UseTestScores which has main() that creates an instance of the TestScores class. And your program should ask the user to enter three test scores, which will be stored in the TestScores object. Then the program should display the average of the scores, as reported by the TestScores object.

Here is a possible solution for the problem:

// A class that represents test scores public class TestScores {

// Fields to hold three test scores private double score1; private double score2; private double score3;

// A constructor that takes three test scores as parameters and initializes the fields public TestScores(double score1, double score2, double score3) { this.score1 = score1; this.score2 = score2; this.score3 = score3; }

// Getter methods for the test score fields public double getScore1() { return score1; }

public double getScore2() { return score2; }

public double getScore3() { return score3; }

// Setter methods for the test score fields public void setScore1(double score1) { this.score1 = score1; }

public void setScore2(double score2) { this.score2 = score2; }

public void setScore3(double score3) { this.score3 = score3; }

// A method that returns the average of the test scores public double getAverage() { return (score1 + score2 + score3) / 3.0; } }

// A class that demonstrates the TestScores class import java.util.Scanner; // To get user input

public class UseTestScores {

// The main method that runs the program public static void main(String[] args) {

// Create a Scanner object to get user input

Scanner sc = new Scanner(System.in);

// Declare variables to store the user input

double s1, s2, s3;

// Ask the user to enter three test scores

System.out.print("Enter the first test score: ");

s1 = sc.nextDouble(); // Read the input as a double

System.out.print("Enter the second test score: ");

s2 = sc.nextDouble(); // Read the input as a double

System.out.print("Enter the third test score: ");

s3 = sc.nextDouble(); // Read the input as a double

// Close the scanner object

sc.close();

// Create an instance of the TestScores class with the user input

TestScores ts = new TestScores(s1, s2, s3);

// Display the average of the test scores, as reported by the TestScores object

System.out.println("The average of the test scores is: " + ts.getAverage());

} }