Q1.

Code:

|  |
| --- |
| ***//Temperature***  ***package LW\_03.Q1\_02;  class Temperature{   private double celsius;  private double fahrenheit;   public Temperature(double celsius){  this.celsius = 0;  this.fahrenheit = 0;  }     //Celsius  public void setCelsius(double celsius) {  this.celsius = celsius;  }  public double getCelsius() {  return celsius;  }   public double toFahrenheit(double celsius){  return celsius \* 9 / 5 + 32;  }   //Fahrenheit    public double getFahrenheit() {  return fahrenheit;  }   public void setFahrenheit(double fahrenheit) {  this.fahrenheit = fahrenheit;  }   public double toCelsius(double fahrenheit){  return (fahrenheit - 32) \* 5 / 9;  }  }***  ***package LW\_03.Q1\_02;  import java.util.Scanner;  public class Main\_toFahrenheits {  public static void main(String[] args) {     Temperature temp;    Scanner scanner = new Scanner(System.in);  System.out.print("Enter temperature in Celsius: ");   double celsius = scanner.nextDouble();   temp = new Temperature(celsius);   //System.out.println(celsius);   double fahrenheit = temp.toFahrenheit(celsius);     System.out.println("Temperature in Fahrenheit: " + fahrenheit);     }    }*** |

Output:

A screen shot of a computer

AI-generated content may be incorrect.

Q2.

Code:

|  |
| --- |
| ***package LW\_03.Q1\_02;  import java.util.Scanner;  public class Main\_toCelsius {  public static void main(String[] args) {   Temperature temp2;   Scanner scanner = new Scanner(System.in);  System.out.print("Enter temperature in Fahrenheit: ");   double fahrenheit = scanner.nextDouble();   temp2 = new Temperature(fahrenheit);   double celsius = temp2.toCelsius(fahrenheit);   System.out.print("Temperature in Celsius: "+ celsius);  } }*** |

Output:

A screenshot of a computer

AI-generated content may be incorrect.

Q3.

Code:

|  |
| --- |
| ***package LW\_03.Q3;  class Circle{   private double r;   public Circle(double ri){  this.r = 0;  }   public double getR() {  return r;  }   public void setR(double r) {  this.r = r;  }   public double computeArea(double r){  return Math.PI\*r\*r;  }   public double computeCircumference(double r){  return 2 \* Math.PI \* r;  }   }***  ***//Main.java***  ***package LW\_03.Q3;  import java.util.Scanner;  public class Main {   public static void main(String[] args) {   Circle R;   Scanner scanner = new Scanner(System.in);  System.out.print("Enter Outer circle radius: ");  double ro = scanner.nextDouble();   R = new Circle(ro);   //System.out.println(ri);   double OuterArea = R.computeArea(ro);  double outerCircumference = R.computeCircumference(ro);   System.out.print("Enter Inner circle radius: ");  double ri = scanner.nextDouble();   R = new Circle(ri);   double InnerArea = R.computeArea(ri);  double InnerCircumference = R.computeCircumference(ri);   //System.out.println("Out"+OuterArea);  //System.out.println("In"+InnerArea);   System.out.print("Shaded Area: "+(OuterArea-InnerArea));  System.out.println();  System.out.print("Shaded Circumference: "+(outerCircumference-InnerCircumference));    } }*** |

Output:

A screenshot of a computer

AI-generated content may be incorrect.

Q4.

Code:

|  |
| --- |
| ***//Owner***  ***package LW\_03.Q4;  public class Owner {   // Data Member  private String ownerName;  private String phoneNo;    public Owner(String ownerName, String phoneNo){  this.ownerName = ownerName;  this.phoneNo = phoneNo;  }   public String getOwnerName() {  return ownerName;  }   public void setOwnerName(String ownerName) {  this.ownerName = ownerName;  }   public String getPhoneNo() {  return phoneNo;  }   public void setPhoneNo(String phoneNo) {  this.phoneNo = phoneNo;  } }***  ***//Bicycle***  ***package LW\_03.Q4;  class Bicycle {   Owner name;  Owner phoneNum;   Owner owner;   public Bicycle(String name,String phoneNum) {  owner.setOwnerName(name);  owner.setPhoneNo(phoneNum);   }   public static void main(String[] args) {   String name = "Kasun";  String num = "+94771234567";   Owner owner1 = new Owner(name, num);  Bicycle bicycle1;   System.out.println("Owner name is "+owner1.getOwnerName());  System.out.println("Owner's phone number is "+owner1.getPhoneNo());   }  }*** |

Output:

A screenshot of a computer

AI-generated content may be incorrect.

Q5.

Code:

|  |
| --- |
| ***//Course***  ***package LW\_03.Q5;  public class Course {  private String courseName;  private String courseCode;  private Lecturer lecturer;    public Course(String courseName, String courseCode){  this.courseName = courseName;  this.courseCode = courseCode;  }   public String getCourseName() {  return courseName;  }   public void setCourseName(String courseName) {  this.courseName = courseName;  }   public String getCourseCode() {  return courseCode;  }   public void setCourseCode(String courseCode) {  this.courseCode = courseCode;  }   public Lecturer getLecturer() {  return lecturer;  }   public void setLecturer(Lecturer lecturer) {  this.lecturer = lecturer;  } }***  ***//Lecturer***  ***package LW\_03.Q5;  public class Lecturer {  private String lecturerName;  private String courseTeaching;    public Lecturer(String lecturerName, String courseTeaching){  this.lecturerName = lecturerName;  this.courseTeaching = courseTeaching;  }   public String getLecturerName() {  return lecturerName;  }   public void setLecturerName(String lecturerName) {  this.lecturerName = lecturerName;  }   public String getCourseTeaching() {  return courseTeaching;  }   public void setCourseTeaching(String courseTeaching) {  this.courseTeaching = courseTeaching;  } }***  ***//Student***  ***package LW\_03.Q5;  public class Student {  private String studentName;  private String degreeName;  private String courseFollowing;   public Student(String studentName, String degreeName, String courseFollowing){  this.studentName = studentName;  this.degreeName = degreeName;  this.courseFollowing = courseFollowing;  }    public String getStudentName() {  return studentName;  }   public void setStudentName(String studentName) {  this.studentName = studentName;  }   public String getDegreeName() {  return degreeName;  }   public void setDegreeName(String degreeName) {  this.degreeName = degreeName;  }   public String getCourseFollowing() {  return courseFollowing;  }   public void setCourseFollowing(String courseFollowing) {  this.courseFollowing = courseFollowing;  } }***  ***//Main***  ***package LW\_03.Q5;  public class Main {  public static void main(String[] args) {   String courseCode = "CTEC 22043";  String courseName = "Object Oriented Programming";  String lecName = "Mr. Kesavan S.";  String studentName = "Thennakoon";  String degreeName = "BICT";     Lecturer lecturer01 = new Lecturer(lecName,courseName) ;   Course course01 = new Course(courseName , courseCode);  course01.setLecturer(lecturer01);   Student student01 = new Student(studentName,degreeName,courseName);   System.out.println("COURSE DETAILS...");  System.out.println(course01.getCourseCode() +' ' + course01.getCourseName() + "Teach by "+course01.getLecturer());   System.out.println("");   System.out.println("LECTURER DETAILS...");  System.out.println("Lecturer "+lecturer01.getLecturerName() + " is teaching "+lecturer01.getCourseTeaching());    System.out.println("");   System.out.println("STUDENT DETAILS...");  System.out.println(student01.getStudentName() + " is following " + student01.getCourseFollowing() + " for " + student01.getDegreeName());      }  }*** |

Output:

A screenshot of a computer program

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