1. Create a class called "Car" that has the following properties: make, model, year, color, and price. Include a constructor and getter and setter methods for each property.

https://codeshare.io/j0dgxK

car.java

```
1  package assignment2;
2  public class car {
3          // TODO Auto-generated method stub
4          private String make;
5          private String model;
6          private int year;
7          private String color;
8          private double price;
9          // constructor for the Car class
10         public car(String make, String model, int year, String color, double price) {
11         this.make = make;
12         this.model = model;
13         this.year = year;
14         this.color = color;
15         this.price = price;
16         }
17         // getters and setters for the make property
18         public String getMake() {
19         return make;
20         }
21         public void setMake(String make) {
22         this.make = make;
23         }
24         // getters and setters for the model property
25         public String getModel() {
26         return model;
```

Problems Javadoc Declaration Console

```
<terminated> car [Java Application] C:\Users\Mahadra\jdk-19\bin\javaw.exe  (02-Mar-2023, 5:20:15 pm – 5:20:15 pm) [pid: 516]
Make: Volkswagen
Model: Vento
Year: 2022
Color: Blue
Price: rs 1600000.0
```

2. Create a class called "Student" that has the following properties: name, age, gender, grade, and GPA. Include a constructor and getterand setter methods for each property.

https://codeshare.io/j0dgJL

student.java

```
20         }
21         public int getAge() {
22             return age;
23         }
24         public String getGender() {
25             return gender;
26         }
27         public int getGrade() {
28             return grade;
29         }
30         public double getGPA() {
31             return GPA;
32         }
33         // Setter methods
34         public void setName(String name) {
35             this.name = name;
36         }
37         public void setAge(int age) {
38             this.age = age;
39         }
40         public void setGender(String gender) {
41             this.gender = gender;
42         }
43         public void setGrade(int grade) {
44             this.grade = grade;
45         }
```

Problems Javadoc Declaration Console

```
<terminated> student [Java Application] C:\Users\Mahadra\jdk-19\bin\javaw.exe  (02-Mar-202
Student name: Ram
Student age: 23
Student gender: Male
Student grade: 10
Student GPA: 4.5
Updated student GPA: 4.0
```

3. Create a class called "Circle" that has the following properties: radius, diameter, and area. Include a constructor and methods to calculate the diameter and area of the circle.

https://codeshare.io/JbMDnZ

```
circle.java
            public circle(double radius) {
                this.radius = radius;
                this.diameter = radius * 2;
                this.area = Math.PI * Math.pow(radius, 2);
            }
            public double getRadius() {
                return radius;
            }

            public double getDiameter() {
                return diameter;
            }

            public double getArea() {
                return area;
            }
                public static void main(String[] args) {
                    circle circle = new circle(9.0);

                    System.out.println("Circle radius: " + circle.getRadius());
                    System.out.println("Circle diameter: " + circle.getDiameter());
                    System.out.println("Circle area: " + circle.getArea());
    }

}

Problems  Javadoc  Declaration  Console
<terminated> circle [Java Application] C:\Users\Mahadra\jdk-19\bin\javaw.exe  (02-Mar-2023, 5:29:47 pm – 5:29:47 pm) [pid: 16136]
Circle radius: 9.0
Circle diameter: 18.0
Circle area: 254.46900494077323
```

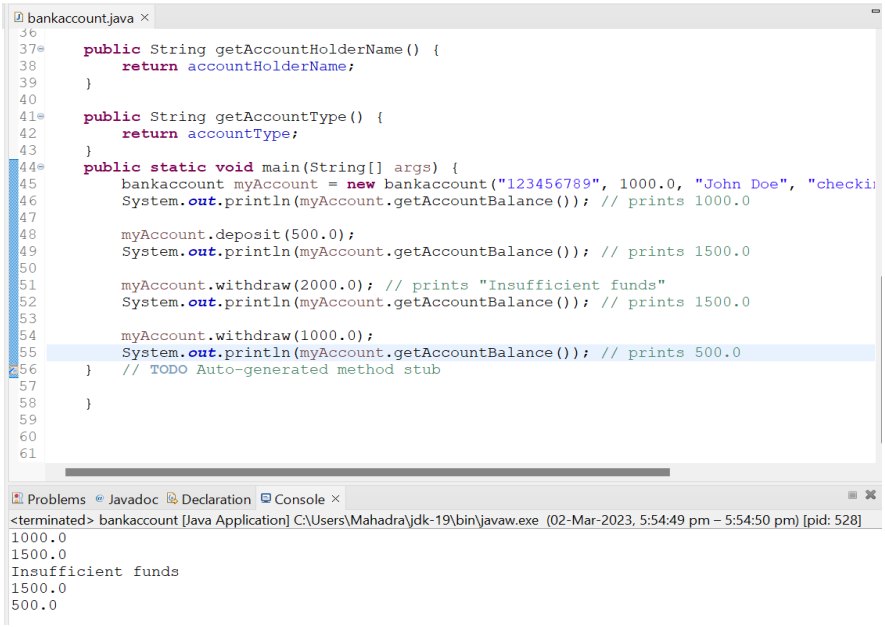
4. Create a class called "Rectangle" that has the following properties: length, width, and area. Include a constructor and a method to calculate the area of the rectangle.

https://codeshare.io/LwEDpV

```
rectangle.java
        // TODO Auto-generated method stub
        //Rectangle Class
            double length;
            double width;
            double area;

            rectangle(double length,double width){
                this.length=length;
                this.width=width;
                this.area=length*width;

            }
            public double getArea()
            {
                return area;
            }

            public static void main(String[] args) {
                // TODO Auto-generated method stub
                rectangle r=new rectangle(3,8);

                double area=r.getArea();
                System.out.println("Area : "+area);
            }
        }

Problems  Javadoc  Declaration  Console
<terminated> rectangle [Java Application] C:\Users\Mahadra\jdk-19\bin\javaw.exe  (02-Mar-2023, 5:46:39 pm – 5:46:40 pm) [pid
Area : 24.0
```

5. Create a class called "BankAccount" that has the following properties: account number, account balance, account holder name, and account type. Include a constructor and methods to deposit and withdraw money from the account.

https://codeshare.io/9OLnq8



6. Create a class called "Person" that has the following properties: name, age, address, phone number, and email address. Include a constructor and getter and setter methods for each property.

https://codeshare.io/dwQgRZ

7. Create a class called "Animal" that has the following properties: name, species, age, and weight. Include a constructor and getter and setter methods for each property

https://codeshare.io/78mdvr

animal.java

```
    public static void main(String[] args) {
        Scanner in = new Scanner(System.in);

        System.out.print("Enter name: ");
        String name = in.nextLine();

        System.out.print("Enter species: ");
        String species = in.nextLine();

        System.out.print("Enter age: ");
        int age = in.nextInt();

        System.out.print("Enter weight: ");
        double weight = in.nextDouble();

        // Create Animal object using user input
       animal animal = new animal(name, species, age, weight);

        // Print out animal object properties
        System.out.println("Name: " + animal.getName());
        System.out.println("Species: " + animal.getSpecies());
        System.out.println("Age: " + animal.getAge());
        System.out.println("Weight: " + animal.getWeight());
}
```

Problems Javadoc Declaration Console

```
animal [Java Application] C:\Users\Mahadra\jdk-19\bin\javaw.exe  (02-Mar-2023, 8:19:41 pm) [pid: 7832]
Enter name: Raj
Enter species: H
Enter age: 23
Enter weight: 67
```

8. Create a class called "Triangle" that has the following properties: base, height, and area. Include a constructor and a method to calculate the area of the triangle

https://codeshare.io/wnvp7B

triangle.java

```
    return height;
    }
    public void setHeight(double height) {
    this.height = height;
    this.area = calculateArea();
    }
    // Getter method for area
    public double getArea() {
    return area;
    }
    // Method to calculate the area of the triangle
    public double calculateArea() {
    return 0.5 * base * height;
    }
    // Main function for testing
    public static void main(String[] args) {
    triangle triangle1 = new triangle(4.0, 5.0);
    System.out.println(triangle1.getArea());
    triangle1.setHeight(6.0);
    System.out.println(triangle1.getArea());
    }

}
```

Problems Javadoc Declaration Console

```
<terminated> triangle [Java Application] C:\Users\Mahadra\jdk-19\bin\javaw.exe  (02-Mar-2023, 8:3
10.0
12.0
```

9. Create a class called "Employee" that has the following properties: name, employee ID, department, job title, and salary. Include a constructor and getter and setter methods for each property

https://codeshare.io/VZEqJ4

triangle.java employee.java ×

```
1  package assignment2;
2
3  public class employee {
4
5      private String name;
6      private int employeeID;
7      private String department;
8      private String jobTitle;
9      private double salary;
10     // Constructor
11     public employee(String name, int employeeID, String department, String jobTitle, dou
12     this.name = name;
13     this.employeeID = employeeID;
14     this.department = department;
15     this.jobTitle = jobTitle;
16     this.salary = salary;
17     }
18     // Getter and Setter methods for name
19     public String getName() {
20     return name;
21     }
22     public void setName(String name) {
23     this.name = name;
24     }
```

Problems Javadoc Declaration Console ×

```
<terminated> employee [Java Application] C:\Users\Mahadra\jdk-19\bin\javaw.exe  (02-Mar-2023, 8:39:43 pm – 8:39:43 pm) [pid: 10728]
Shashank
60000.0
55000.0
```

10. Create a class called "Address" that has the following properties: street, city, state, zip code, and country. Include a constructor and getter and setter methods for each property.

https://codeshare.io/LwEpn7

address.java ×

```
62                      String street = scanner.nextLine();
63
64                      System.out.print("Enter city: ");
65                      String city = scanner.nextLine();
66
67                      System.out.print("Enter state: ");
68                      String state = scanner.nextLine();
69
70                      System.out.print("Enter ZIP code: ");
71                      String zipCode = scanner.nextLine();
72
73                      System.out.print("Enter country: ");
74                      String country = scanner.nextLine();
75
76                      address address = new address(street, city, state, zipCode, country)
77
78                      System.out.println("Street address: " + address.getStreet());
79                      System.out.println("City: " + address.getCity());
80                      System.out.println("State: " + address.getState());
81                      System.out.println("ZIP code: " + address.getZipCode());
82                      System.out.println("Country: " + address.getCountry());
83                  }
84 }
85
```

Problems Javadoc Declaration Console ×

```
address [Java Application] C:\Users\Mahadra\jdk-19\bin\javaw.exe  (02-Mar-2023, 8:45:41 pm) [pid: 9336]
Enter street address: #141,Housing Board
Enter city: T Narasipura
Enter state: Karnataka
Enter ZIP code: 571124
Enter country: India
```