

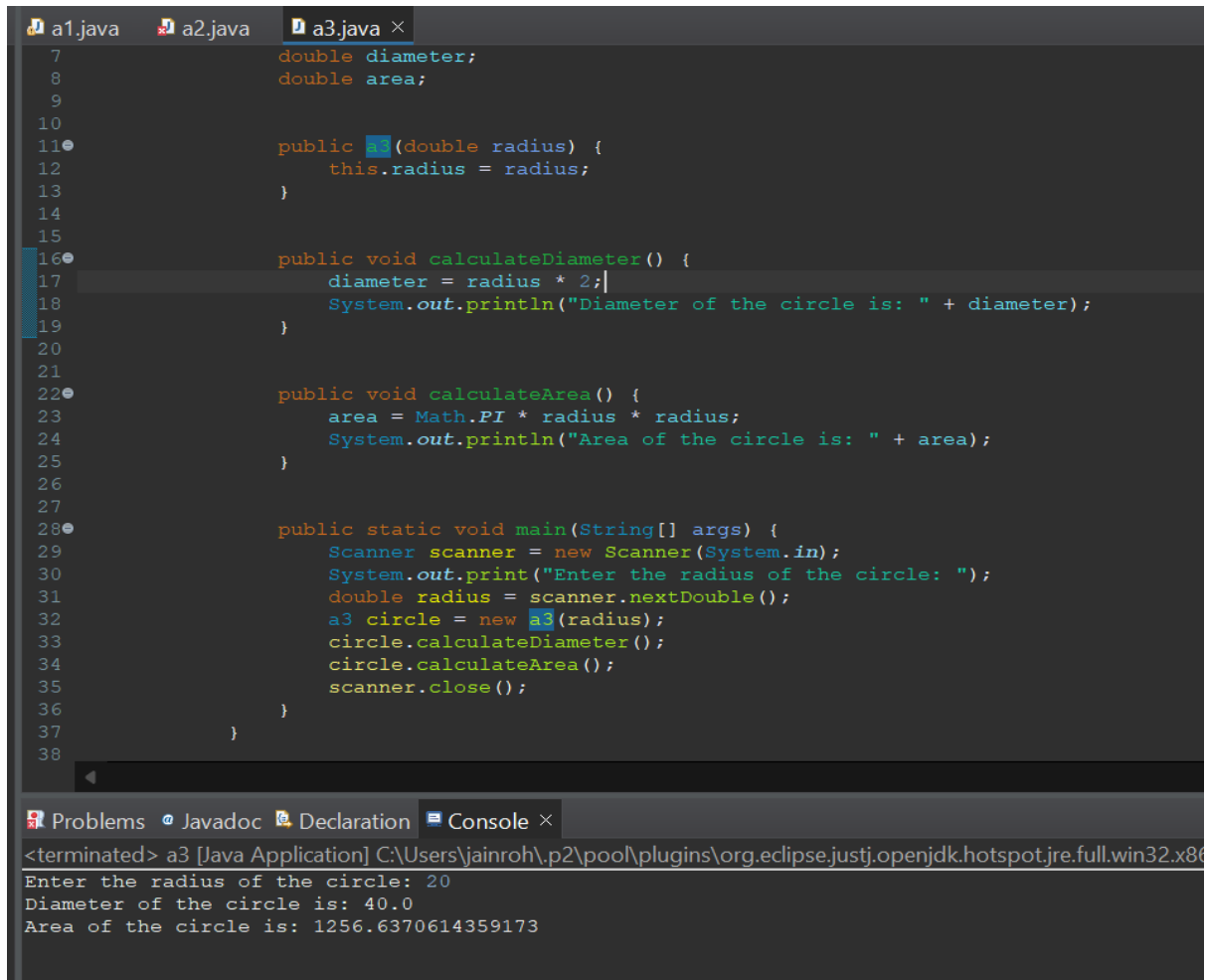
```
61 Scanner scanner = new Scanner(System.in);
62
63 System.out.print("Enter name: ");
64 String name = scanner.nextLine();
65
66 System.out.print("Enter age: ");
67 int age = scanner.nextInt();
68
69 System.out.print("Enter gender: ");
70 String gender = scanner.nextLine();
71 scanner.nextLine(); // consume newline left-over
72
73 System.out.print("Enter Grade: ");
74 int Grade = scanner.nextInt();
75
76 System.out.print("Enter gpa: ");
77 double gpa = scanner.nextDouble();
78
79 a2 car = new a2(name, age, gender, Grade, gpa);
80
81 System.out.println("Name: " + car.getName());
82 System.out.println("Age: " + car.getAge());
83 System.out.println("Gender: " + car.getGender());
84 System.out.println("Grade: " + car.getGrade());
85 System.out.println("gpa: " + car.getGpa());
86
87
```

Problems Javadoc Declaration Console X

```
<terminated> a2 [Java Application] C:\Users\jainroh\p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86
Enter name: Rohan
Enter age: 21
Enter gender: male
Enter Grade: 12
Enter gpa: 8.7
Name: Rohan
```

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/BA7lDn>



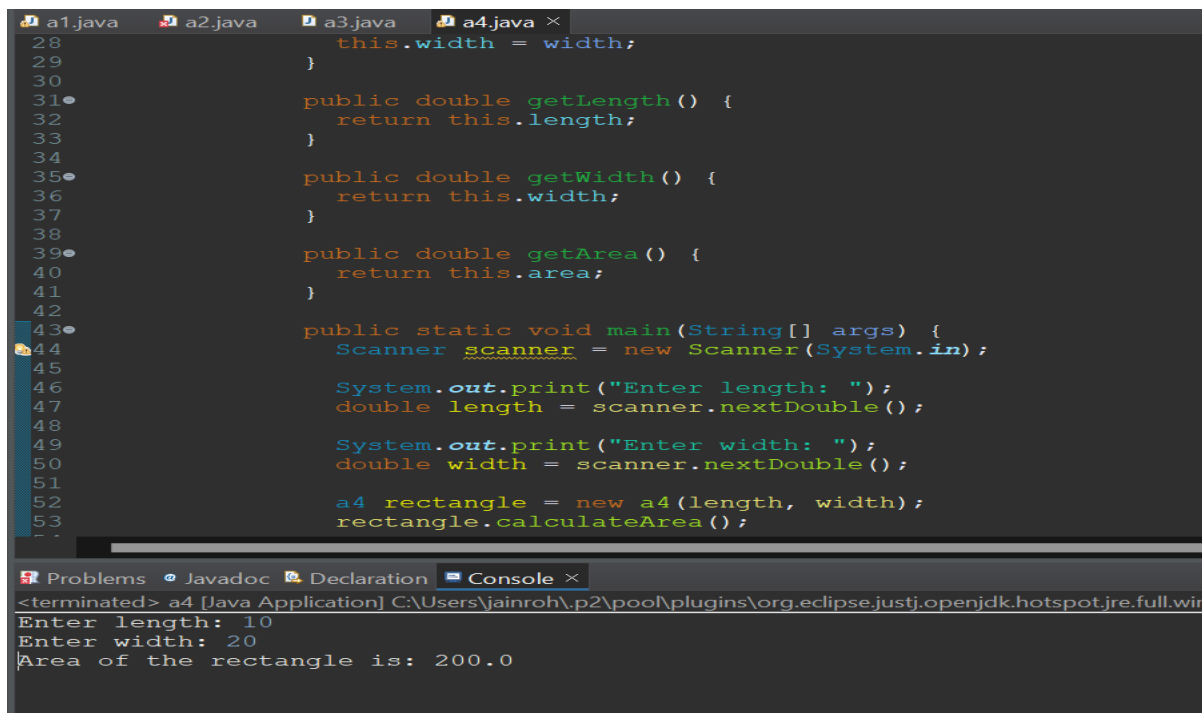
```
a1.java a2.java a3.java ×
7      double diameter;
8      double area;
9
10
11     public Circle(double radius) {
12         this.radius = radius;
13     }
14
15
16     public void calculateDiameter() {
17         diameter = radius * 2;
18         System.out.println("Diameter of the circle is: " + diameter);
19     }
20
21
22     public void calculateArea() {
23         area = Math.PI * radius * radius;
24         System.out.println("Area of the circle is: " + area);
25     }
26
27
28     public static void main(String[] args) {
29         Scanner scanner = new Scanner(System.in);
30         System.out.print("Enter the radius of the circle: ");
31         double radius = scanner.nextDouble();
32         Circle circle = new Circle(radius);
33         circle.calculateDiameter();
34         circle.calculateArea();
35         scanner.close();
36     }
37
38
```

Problems Javadoc Declaration Console ×

```
<terminated> a3 [Java Application] C:\Users\jainroh\p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86
Enter the radius of the circle: 20
Diameter of the circle is: 40.0
Area of the circle is: 1256.6370614359173
```

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/8plkVd>

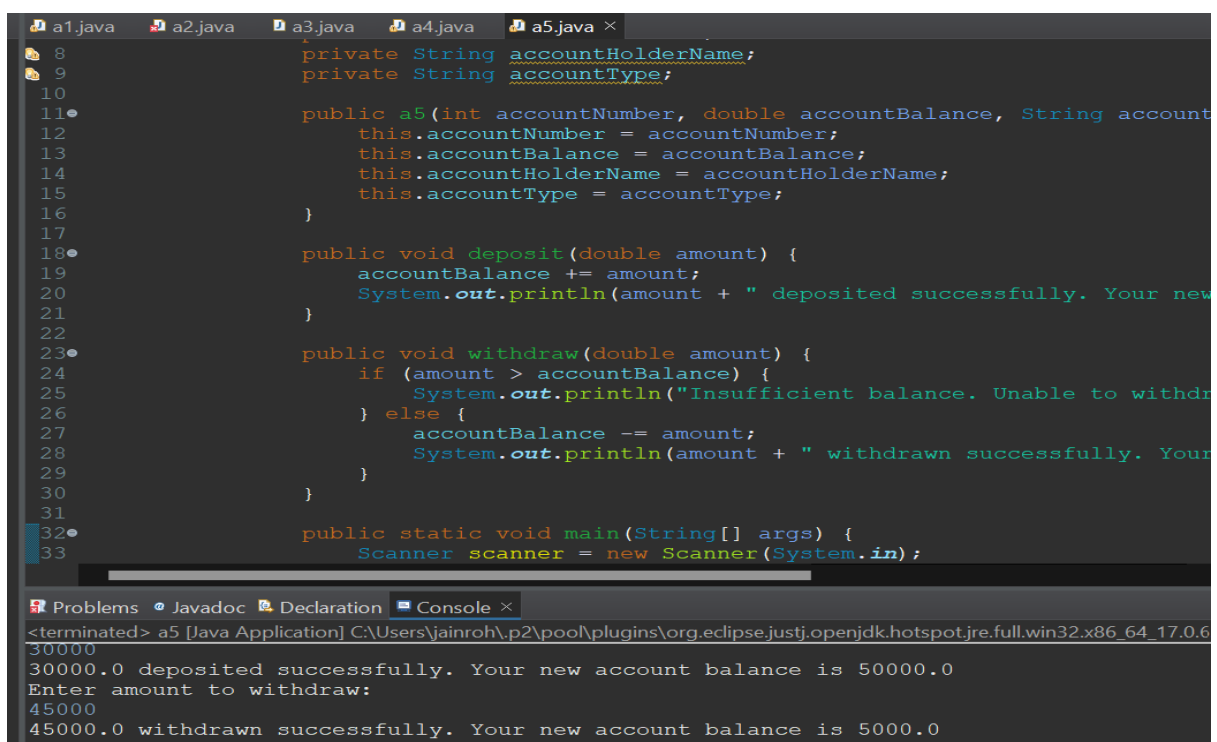


```
28         this.width = width;
29     }
30
31     public double getLength() {
32         return this.length;
33     }
34
35     public double getWidth() {
36         return this.width;
37     }
38
39     public double getArea() {
40         return this.area;
41     }
42
43     public static void main(String[] args) {
44         Scanner scanner = new Scanner(System.in);
45
46         System.out.print("Enter length: ");
47         double length = scanner.nextDouble();
48
49         System.out.print("Enter width: ");
50         double width = scanner.nextDouble();
51
52         a4 rectangle = new a4(length, width);
53         rectangle.calculateArea();
54     }
```

<terminated> a4 [Java Application] C:\Users\jainroh\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86\_64\_17.0.6\jre\bin\java.exe  
Enter length: 10  
Enter width: 20  
Area of the rectangle is: 200.0

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/OdE6Zx>



```
8     private String accountHolderName;
9     private String accountType;
10
11     public a5(int accountNumber, double accountBalance, String accountHolderName, String accountType) {
12         this.accountNumber = accountNumber;
13         this.accountBalance = accountBalance;
14         this.accountHolderName = accountHolderName;
15         this.accountType = accountType;
16     }
17
18     public void deposit(double amount) {
19         accountBalance += amount;
20         System.out.println(amount + " deposited successfully. Your new account balance is " + accountBalance);
21     }
22
23     public void withdraw(double amount) {
24         if (amount > accountBalance) {
25             System.out.println("Insufficient balance. Unable to withdraw.");
26         } else {
27             accountBalance -= amount;
28             System.out.println(amount + " withdrawn successfully. Your new account balance is " + accountBalance);
29         }
30     }
31
32     public static void main(String[] args) {
33         Scanner scanner = new Scanner(System.in);
34
35         System.out.print("Enter account number: ");
36         int accountNumber = scanner.nextInt();
37
38         System.out.print("Enter account balance: ");
39         double accountBalance = scanner.nextDouble();
40
41         System.out.print("Enter account holder name: ");
42         String accountHolderName = scanner.next();
43
44         System.out.print("Enter account type: ");
45         String accountType = scanner.next();
46
47         a5 account = new a5(accountNumber, accountBalance, accountHolderName, accountType);
48
49         System.out.print("Enter amount to deposit: ");
50         double amountToDeposit = scanner.nextDouble();
51         account.deposit(amountToDeposit);
52
53         System.out.print("Enter amount to withdraw: ");
54         double amountToWithdraw = scanner.nextDouble();
55         account.withdraw(amountToWithdraw);
56     }
```

<terminated> a5 [Java Application] C:\Users\jainroh\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86\_64\_17.0.6\jre\bin\java.exe  
30000  
30000.0 deposited successfully. Your new account balance is 50000.0  
Enter amount to withdraw:  
45000  
45000.0 withdrawn successfully. Your new account balance is 5000.0

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/nzoO31>

```
63      System.out.print("Enter name: ");
64      String name = input.nextLine();
65
66      System.out.print("Enter age: ");
67      int age = input.nextInt();
68      input.nextLine();
69
70      System.out.print("Enter address: ");
71      String address = input.nextLine();
72
73      System.out.print("Enter phone number: ");
74      String phoneNumber = input.nextLine();
75
76      System.out.print("Enter email address: ");
77      String emailAddress = input.nextLine();
78
79      a6 person = new a6(name, age, address, phoneNumber, emailAddre
80
81      System.out.println("\nName: " + person.getName());
82      System.out.println("Age: " + person.getAge());
83      System.out.println("Address: " + person.getAddress());
84      System.out.println("Phone number: " + person.getPhoneNumber());
85      System.out.println("Email address: " + person.getEmailAddress(
86      }
87  }
88
```

Problems Javadoc Declaration Console ×

<terminated> a6 [Java Application] C:\Users\jainroh\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86\_64\_17.0.6.v2

Name: rohan  
Age: 21  
Address: thandaga  
Phone number: 8277424985  
Email address: rohan@gmail.com

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/yo0bwq>

```
58
59         System.out.print("Enter name: ");
60         String name = input.nextLine();
61
62         System.out.print("Enter species: ");
63         String species = input.nextLine();
64
65         System.out.print("Enter age: ");
66         int age = input.nextInt();
67
68         System.out.print("Enter weight: ");
69         double weight = input.nextDouble();
70
71         // Create Animal object using user input
72         a7 animal = new a7(name, species, age, weight);
73
74         // Print out animal object properties
75         System.out.println("Name: " + animal.getName());
76         System.out.println("Species: " + animal.getSpecies());
77         System.out.println("Age: " + animal.getAge());
78         System.out.println("Weight: " + animal.getWeight());
79     }
80 }
81
82
83
```

Problems Javadoc Declaration Console ×

<terminated> a7 [Java Application] C:\Users\jainroh\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86\_64\_17.0

Name: Tiger  
Species: animal  
Age: 20  
Weight: 40.0|

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/oQ3zmp>

```
a1.java a2.java a3.java a4.java a5.java a6.java a7.java a8.java ×
1 package a8;
2 import java.util.Scanner;
3 public class a8 {
4
5
6         private double base;
7         private double height;
8         private double area;
9
10        // Constructor
11        public a8(double base, double height) {
12            this.base = base;
13            this.height = height;
14            this.area = calculateArea();
15        }
16
17        // Method to calculate area
18        public double calculateArea() {
19            return 0.5 * base * height;
20        }
21
22        // Getters and Setters
23        public double getBase() {
24            return base;
25        }
26
27        ...
28    }
29 }
```

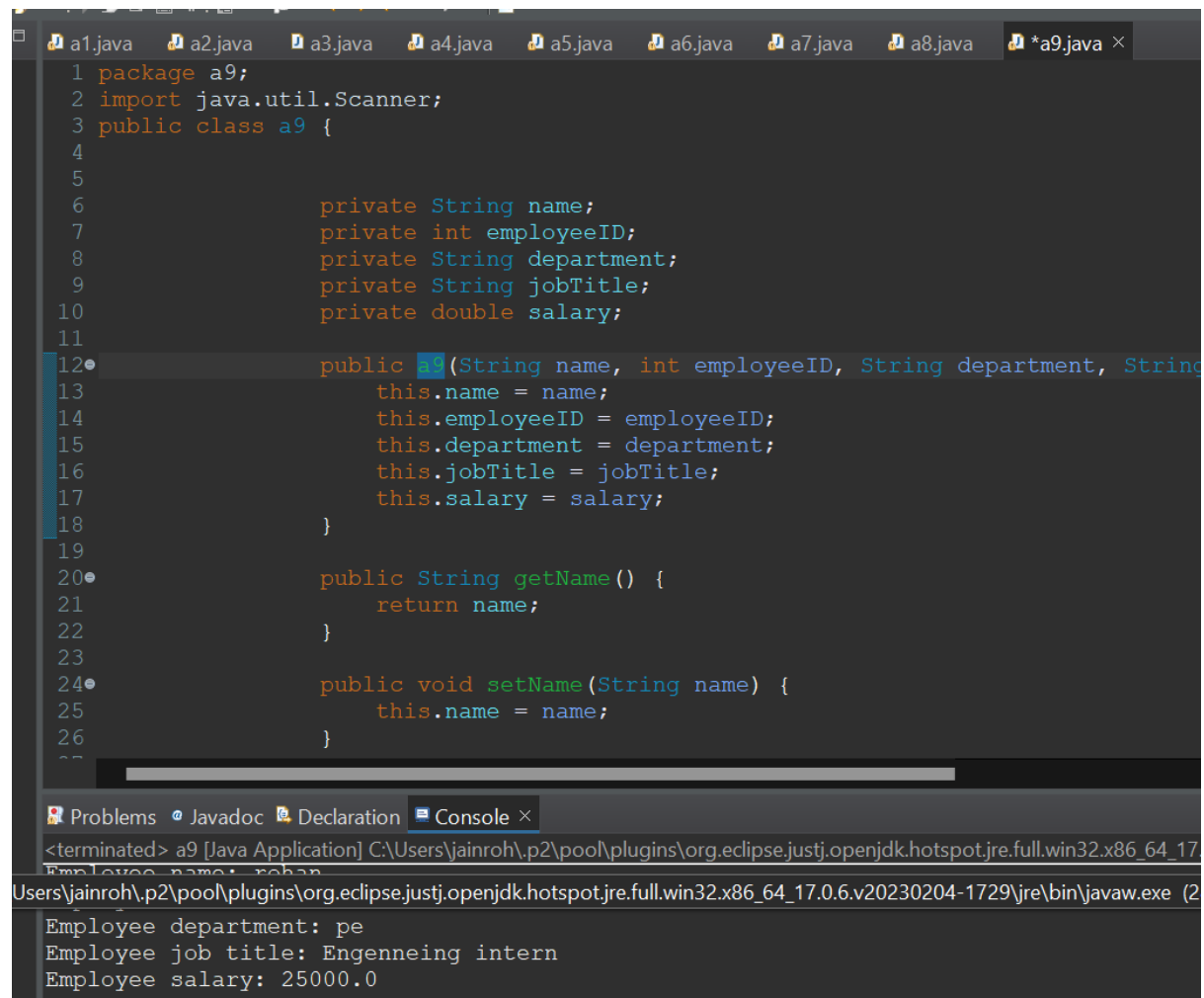
Problems Javadoc Declaration Console ×

<terminated> a8 [Java Application] C:\Users\jainroh\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32

Enter base length: 20  
Enter height length: 10  
Base: 20.0  
Height: 10.0  
Area: 100.0

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/LwEObb>



```
1 package a9;
2 import java.util.Scanner;
3 public class a9 {
4
5
6     private String name;
7     private int employeeID;
8     private String department;
9     private String jobTitle;
10    private double salary;
11
12    public a9(String name, int employeeID, String department, String jobTitle, double salary) {
13        this.name = name;
14        this.employeeID = employeeID;
15        this.department = department;
16        this.jobTitle = jobTitle;
17        this.salary = salary;
18    }
19
20    public String getName() {
21        return name;
22    }
23
24    public void setName(String name) {
25        this.name = name;
26    }
27
28 }
```

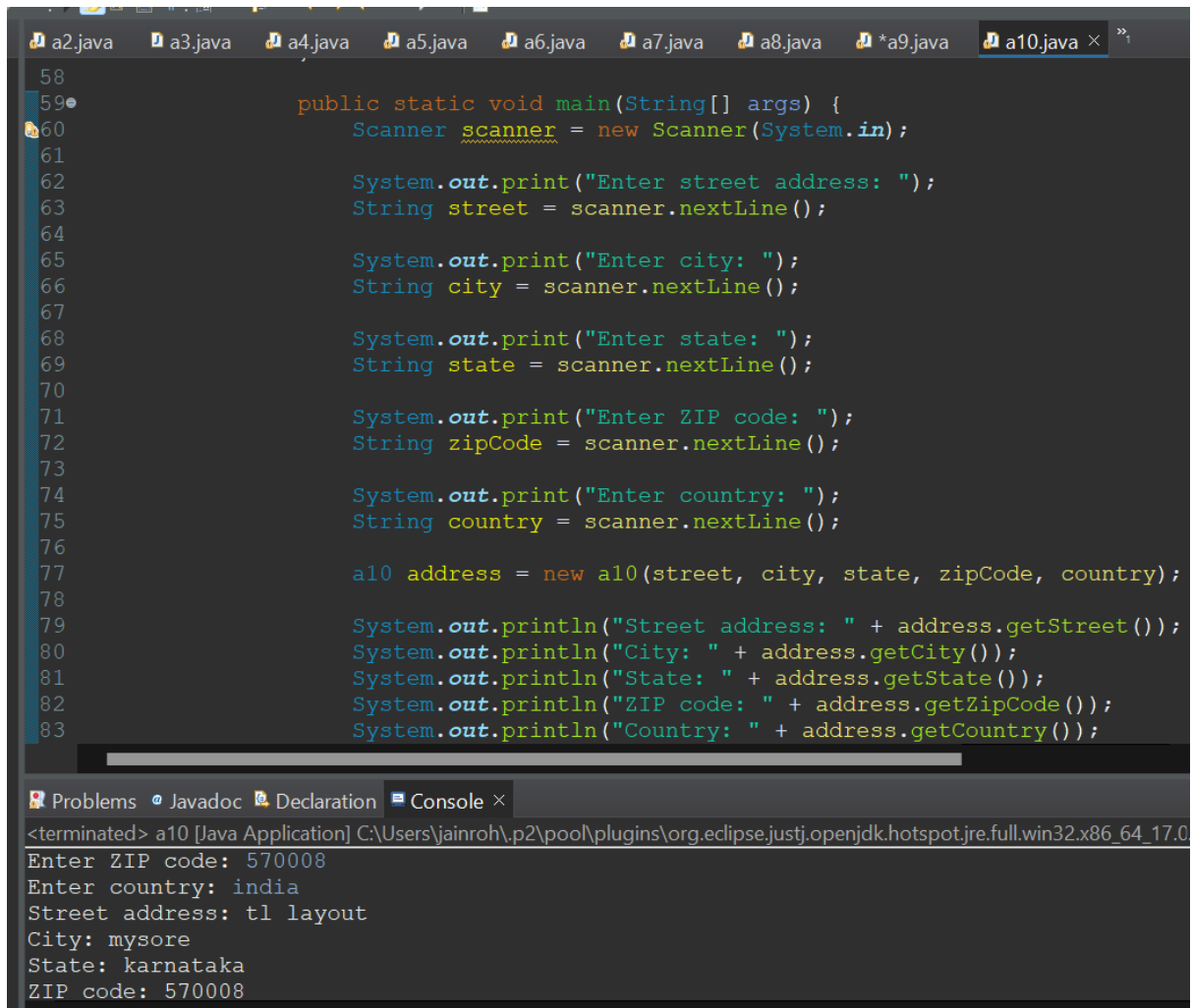
Problems Javadoc Declaration Console ×

<terminated> a9 [Java Application] C:\Users\jainroh\p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86\_64\_17.0.6.v20230204-1729\jre\bin\javaw.exe (2)

Employee department: pe  
Employee job title: Engenneing intern  
Employee salary: 25000.0

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/4eonQd>



The screenshot shows the Eclipse IDE with a10.java open. The code is a Java application that uses a Scanner to collect user input for an address and then prints it back. The console shows the execution results, including the user's input and the program's output.

```
58
59
60     public static void main(String[] args) {
61         Scanner scanner = new Scanner(System.in);
62
63         System.out.print("Enter street address: ");
64         String street = scanner.nextLine();
65
66         System.out.print("Enter city: ");
67         String city = scanner.nextLine();
68
69         System.out.print("Enter state: ");
70         String state = scanner.nextLine();
71
72         System.out.print("Enter ZIP code: ");
73         String zipCode = scanner.nextLine();
74
75         System.out.print("Enter country: ");
76         String country = scanner.nextLine();
77
78         a10 address = new a10(street, city, state, zipCode, country);
79
80         System.out.println("Street address: " + address.getStreet());
81         System.out.println("City: " + address.getCity());
82         System.out.println("State: " + address.getState());
83         System.out.println("ZIP code: " + address.getZipCode());
84         System.out.println("Country: " + address.getCountry());
85     }
```

Problems Javadoc Declaration Console ×

<terminated> a10 [Java Application] C:\Users\jainroh\p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86\_64\_17.0

Enter ZIP code: 570008  
Enter country: india  
Street address: tl layout  
City: mysore  
State: karnataka  
ZIP code: 570008