

WEEK-03

```
J person.java > employee > displaydetails()
1 import java.util.Scanner;
2 //parent class
3 class person
4 {
5     String name;
6     int age;
7     person(String name, int age)
8     {
9         this.name=name;
10        this.age=age;
11    }
12 }
13 //child class
14 class employee extends person
15 {
16     String employee_id;
17     employee(String name, int age, String employee_id)
18     {
19         super(name, age); //calling parent constructor
20         this.employee_id=employee_id;
21     }
22
23     void displaydetails()
24     {
25         System.out.println("\n--Employee Details--");
26         System.out.println("Name:" +name);
27         System.out.println("Age:" +age);
28         System.out.println("Employee ID:" +employee_id);
29     }
30 }
```

```
31 // main class
32 class employeedetails
33 {
34     Run | Debug
35     public static void main(String[] args)
36     {
37         Scanner sc=new Scanner(System.in);
38         System.out.println("Enter name:");
39         String name=sc.nextLine();
40         System.out.println("Enter Age:");
41         int age=sc.nextInt();
42
43         sc.nextLine(); //consume new line
44
45         System.out.println("Enter employee id:");
46         String employee_id=sc.nextLine();
47
48         // create employee object
49         employee emp=new employee(name, age, employee_id);
50         emp.displaydetails();
51         sc.close();
52     }
53 }
```

PROBLEMS 5 OUTPUT DEBUG CONSOLE TERMINAL PORTS

PS C:\Users\BMSCE\Desktop\SHIRISHA B R> javac person.java
PS C:\Users\BMSCE\Desktop\SHIRISHA B R> java employeedetails

Enter name:

shirishabhr

Enter Age:

18

Enter employee id:

b1050

--Employee Details--

Name:shirishabhr

Age:18

Employee ID:b1050

PS C:\Users\BMSCE\Desktop\SHIRISHA B R>

```
J shape1.java > rectangleArea
1 import java.util.Scanner;
2
3 class shape1
4 {
5     double area()
6     {
7         return 0;
8     }
9 }
10 class rectangle extends shape
11 {
12     double length, width;
13     rectangle(double length, double width)
14     {
15         this.length=length;
16         this.width=width;
17     }
18
19     @Override
20     double area()
21     {
22         return length * width;
23     }
24 }
```

```
25  class rectangleArea
26  {
27      Run | Debug
28      public static void main(String[] args)
29      {
30          Scanner sc=new Scanner(System.in);
31          System.out.println("Enter length:");
32          double length=sc.nextDouble();
33          System.out.println("Enter width:");
34          double width=sc.nextDouble();
35
36          rectangle r = new rectangle(length, width);
37          System.out.println("\nArea of a rectangle:" +r.area());
38          sc.close();
39      }
40  }
41
```

PROBLEMS 4 OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
PS C:\Users\BMSCE\Desktop\SHIRISHA B R> javac shape1.java
PS C:\Users\BMSCE\Desktop\SHIRISHA B R> java rectangleArea
Enter length:
2.33
Enter width:
3.99

Area of a rectangle:9.296700000000001
PS C:\Users\BMSCE\Desktop\SHIRISHA B R>
```

```
1 import java.util.Scanner;
2
3 class bankAccount
4 {
5     String accountNumber;
6     double balance;
7
8     bankAccount(String accountNumber, double balance)
9     {
10         this.accountNumber=accountNumber;
11         this.balance=balance;
12     }
13 }
14 class savingsAccount extends bankAccount
15 {
16     double interestRate;
17     savingsAccount(String accountNumber, double balance, double interestRate)
18     {
19         super(accountNumber, balance);
20         this.interestRate=interestRate;
21     }
22
23     void displaydetails()
24     {
25         System.out.println("\n--Account Details--");
26         System.out.println("Account number:" +accountNumber);
27         System.out.println("Balance:" +balance);
28         System.out.println("Interest Rate:" +interestRate);
29     }
30 }
```

```
32
33 class bankdetails
34 {
35     Run | Debug
36     public static void main(String[] args)
37     {
38         Scanner sc=new Scanner(System.in);
39
40         System.out.println("Enter account number:");
41         String accnum=sc.nextLine();
42         System.out.println("Enter balance:");
43         double bal=sc.nextDouble();
44         System.out.println("Enter Interest Rate:");
45         double rate=sc.nextDouble();
46
47         savingsAccount sa=new savingsAccount(accnum, bal, rate);
48         sa.displaydetails();
49
50         sc.close();
51     }
52 }
```

PROBLEMS 4 OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
PS C:\Users\BMSCE\Desktop\SHIRISHA B R> javac bankAccount.java
PS C:\Users\BMSCE\Desktop\SHIRISHA B R> java bankdetails
Enter account number:
67890001000
Enter balance:
12,000
Enter Interest Rate:
1000

--Account Details--
Account number:67890001000
Balanace:12000.0
Interest Rate:1000.0
PS C:\Users\BMSCE\Desktop\SHIRISHA B R>
```

```
J animal.java > 🐶 Dog > 🎧 makesound()
1  | class animal
2  {
3  |     void makesound()
4  |     {
5  |         System.out.println("The animal makes a sound");
6  |     }
7  }
8  class Dog extends animal
9  {
10 |     @Override
11 |     void makesound()
12 |     {
13 |         super.makesound(); //call parent method
14 |         System.out.println("The dog barks");
15 |     }
16 }
17 class animalsound
18 {
19     Run | Debug
20     public static void main(String[] args)
21     {
22         Dog d=new Dog();
23         d.makesound();
24     }
}
```

PROBLEMS 3 OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
PS C:\Users\BMSCE\Desktop\SHIRISHA B R> javac animal.java
PS C:\Users\BMSCE\Desktop\SHIRISHA B R> java animalsound
The animal makes a sound
The dog barks
PS C:\Users\BMSCE\Desktop\SHIRISHA B R>
```

```
J vehicle.java > vehiclespeed > main(String[])
1   | class vehicle
2   |
3   |   int speed=50;
4   |
5   class Bike extends vehicle
6   {
7       int speed=100;
8
9       void displayspeed()
10      {
11          System.out.println("Bike speed:" +speed);
12          System.out.println("vehicle speed:" +super.speed);
13      }
14  }
15 class vehiclespeed
16 {
    Run | Debug
17     public static void main(String[] args)
18     {
19         Bike b=new Bike();
20         b.displayspeed();
21     }
22 }
```

PROBLEMS 2 OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
PS C:\Users\BMSCE\Desktop\SHIRISHA B R> javac vehicle.java
PS C:\Users\BMSCE\Desktop\SHIRISHA B R> java vehiclespeed
Bike speed:100
vehicle speed:50
PS C:\Users\BMSCE\Desktop\SHIRISHA B R>
```

```

J stuperson.java > student
1  class stuperson
2  {
3      String name;
4
5      stuperson(String name)
6      {
7          this.name=name;
8      }
9  }
10
11 class student extends stuperson
12 {
13     int grade;
14
15     student(String name, int grade)
16     {
17         super(name); //calling parent constructor
18         this.grade=grade;
19     }
20
21     void display()
22     {
23         System.out.println("Name:" +name);
24         System.out.println("Grade:" +grade);
25     }
26 }
27
28 class studentdemo
29 {
30     Run | Debug
31     public static void main(String[] args)
32     {
33         student s=new student("Shirisha", 10);
34         s.display();
35     }
}

```

PROBLEMS 1 OUTPUT DEBUG CONSOLE TERMINAL PORTS

```

PS C:\Users\BMSCE\Desktop\SHIRISHA B R> javac person.java
PS C:\Users\BMSCE\Desktop\SHIRISHA B R> java studentdemo
Name:Shirisha
Grade:10
PS C:\Users\BMSCE\Desktop\SHIRISHA B R>

```