



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 {
    Run | Debug
34     public static void main(String[] args)
35     {
36         Scanner sc=new Scanner(System.in);
37         System.out.println("Enter name:");
38         String name=sc.nextLine();
39         System.out.println("Enter Age:");
40         int age=sc.nextInt();
41
42         sc.nextLine(); //consume new line
43
44         System.out.println("Enter employee id:");
45         String employee_id=sc.nextLine();
46
47         // create employee object
48         employee emp=new employee(name, age, employee_id);
49         emp.displaydetails();
50         sc.close();
51     }
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:
shirishabr
Enter Age:
18
Enter employee id:
b1050

--Employee Details--
Name:shirishabr
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 shape1
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  {
    Run | Debug
27      public static void main(String[] args)
28      {
29          Scanner sc=new Scanner(System.in);
30          System.out.println("Enter length:");
31          double length=sc.nextDouble();
32          System.out.println("Enter width:");
33          double width=sc.nextDouble();
34
35          rectangle r = new rectangle(length, width);
36          System.out.println("\nArea of a rectangle:" +r.area());
37          sc.close();
38      }
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
Balance:12000.0
Interest Rate:1000.0
PS C:\Users\BMSCE\Desktop\SHIRISHA B R>

```

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     }
25 }
```

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  {
17      Run | Debug
18      public static void main(String[] args)
19      {
20          Bike b=new Bike();
21          b.displayspeed();
22      }
23  }

```

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 construcor
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     }
36 }
```

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> |