

```
1
2 public class student {
3     int rollno=1706;
4     String subj="IT";
5     String Sem="2nd";
6
7 void display() {
8     System.out.println(rollno);
9     System.out.println(subj);
10    System.out.println(Sem);
11 }
12 }
13 class ExeProgram{
14     public static void main(String[] args) {
15         student obj=new student();
16         obj.display();
17     }
18 }
```

student obj - ExeProgram.main(String[])

Press F2 for format

```
public void Deposit(int depAmnt) {
```

```
    if (depAmnt <= 0) {
```

```
        System.out.println("Invalid Deposit Amount");
```

```
    } else
```

```
    {
```

```
        BalanceAmnt = BalanceAmnt + depAmnt;
```

```
    }
```

```
}
```

```
public void withdraw(int drawAmnt) {
```

```
    if (drawAmnt <= 0 || drawAmnt > BalanceAmnt) {
```

```
        System.out.println("Invalid Withdraw Amount");
```

```
    } else
```

```
    {
```

without ques

```
        BalanceAmnt = BalanceAmnt - drawAmnt;
```

```
    }
```

```
}
```

```
}
```

```
1 public class shape {
2
3     public void shape() {
4         System.out.println("there are many shapes");
5     }
6 }
7
8 class circle extends shape {
9
10    public void shape() {
11        System.out.println("circle ha 2 sides");
12    }
13 }
14
15 class square extends shape {
16
17    public void shape() {
18        System.out.println("square ha 4 sides");
19    }
20 }
21
22 class triangle extends shape {
23
24    public void shape() {
25        System.out.println("triangle has 3 sides");
26    }
27 }
28
29 /*class main{
30 public static void main(String[]args) {
31     shape c=new circle();
32     shape s=new square();
33     shape t=new triangle();
34     c.shape();
35     s.shape();
36     t.shape();
37 }
38 }
39 */
40
41
```

```

1 package inheritance;
2
3 public class vehicle {
4     int seats;
5     int tyre;
6     String breaks;
7
8     public vehicle(int s,int t,String b) {
9         seats=s;
10        tyre=t;
11        breaks=b;
12    }
13
14    void Display() {
15        System.out.println("seats: "+seats+"\ntyre: "+tyre+"\nbreaks: "+breaks);
16        /* System.out.println("seats" +seats);
17        System.out.println("tyre" +tyre);
18        System.out.println("breaks" +breaks);*/
19    }
20 }
21
22 class car extends vehicle{
23     String carcolor;
24     String carmodel;
25
26     public car(int s,int t,String b,String cc,String cm) {
27         super(s,t,b);
28         this.carcolor=cc;
29         this.carmodel=cm;
30     }
31
32     public void setmethod() {
33         carcolor="red";
34         carmodel="sgd7555";
35     }
36
37     void display() {
38         System.out.println("\n carcolor= "+carcolor+"\n carmodel= "+carmodel);
39         /* System.out.println("carcolor"+carcolor);
40         System.out.println("carmodel"+ carmodel);*/
41     }
42
43     class Exeprogram{
44     public static void main(String[] args) {
45         car obj=new car(4,4,"yes","red","sgd7555");
46         obj.Display();
47         obj.display();
48     }
49 }
50
51
52

```




Console

ExeProgram.java

account.java

<terminated> ExeProgram (1) [Java Application] D:\JDK And Eclipse\bin\javaw

```
Withdraw amount is120.0  
remaining balanceis-120.0  
balance-120.0  
salary0  
accountno=0  
accountno=0  
salary=0  
balance=-136.2  
Intrest Rate =4.5  
average monthlly balance100.0
```

```
1
2 public class ExeProgram {
3
4     public static void main(String [] args) {
5
6         Rectangle r1=new Rectangle();
7         r1.set_length(15);
8         r1.set_width(2);
9         r1.cal_Area();
10        r1.cal_Peri();
11        r1.display();
12
13
14    }
15 }
16
```

Console

<terminated> ExeProgram (2) [Java Application] E:\New folder\Ecllips\jre\bin\javaw.exe (Dec 14, 2021, 9:30:05 PM – 9:30:05 PM)

Length=15.0

Width=2.0

Area=30.0

Perimeter=34.0

Source Refactor Navigate Search Project Run Window Help



test.java

*student.java

Problems @ Javadoc Declaration Console

<terminated> test [Java Application] C:\Program Files\Java\jdk-12\bin

5
44.0
A

```
1
2 public class student {
3     int rollno=1706;
4     String subj="IT";
5     String Sem="2nd";
6
7     void display() {
8         System.out.println(rollno);
9         System.out.println(subj);
10        System.out.println(Sem);
11    }
12 }
13 class ExeProgram{
14     public static void main(String[]args) {
15         student myrollno=new student();
16         student mysubj=new student();
17         student mySem=new student();
18     }
19 }
```

```
1 package revision;
2
3 public class display {
4
5     /*public static void main(String[]args)
6     {
7         defValue v1=new defValue();
8         String name;
9         System.out.println(v1.s);
10        System.out.println(v1.i);
11        System.out.println(v1.l);
12        System.out.println(v1.b);
13        System.out.println(v1.c);
14        System.out.println(v1.name);
15        System.out.println(v1.d);
16
17    }*/
18
19    class defValue{
20        short s;
21        int i;
22        long l;
23        boolean b;
24        char c;
25        float f;
26        String name;
27        double d;
28
29    }
30
31 }
32
```



```

1
2 public class ExeProgram {
3     public static void main(String[] args) {
4         Bank b1=new Bank("HBL",042,"Current Acc",5000);
5
6         b1.Deposit(2000);
7         b1.display();
8         b1.withDraw(1000);
9         b1.display();
10    }
11 }
12

```

```
24      carcolor = "red";  
25      carmodel = "sgd7555";  
26  }  
27  void display(){  
28      System.out.println("\n Carcolor= " + "\n Car Model= " + carmodel);  
29  }  
30  public static void main(String[] args){  
31      car obj = new car(4,4,"yes","blue","sgd7555");  
32      obj.Display();  
33      obj.display();  
34  }
```

Execute Mode, Version, Inputs & Arguments

JDK 17.0.1

☐ Interactive

Stdin Inputs

CommandLine Arguments

Execute

Result

CPU Time: 0.11 sec(s), Memory: 39792 kilobyte(s)

compiled and executed in 1.747 sec(s)

int tyre = 4;

String brake = "b";

}

void Display () {

System.out.println("seats");

System.out.println("tyre");

System.out.println("brake" + brake);

}

Class car extends vehicle {

String carcolor;

String carmodel;

public car (String cc, String cm) { → constructor

String color = cc;

String model = cm;

public void setmethod ()

{

String carcolor = "Red";

String carmodel = "BMW";

}

void display () {

System.out.println("car color");

System.out.println("car model");

}



Pac...



Bank

revision

> JRE System Libr

src

revision

> display.ja

> house.jav

> mycode.j

> room.java

> Streq.java

> student

Console

room.java

house.java

<terminated> house [Java Application] D:\JDK And Eclipse\bin

```
p  
room type isnull  
0.0  
NO
```


ram/src/ExeProgram.java - Eclipse IDE

Refactor Navigate Search Project Run Window Help



ExeProgram.java Distance.java Address.java Bank.java Rectangle.java Car.java

```
1
2 public class ExeProgram {
3
4     public static void main(String args[]) {
5         defValue v1=new defValue();
6         String name;
7         System.out.println(v1.i);
8         System.out.println(v1.name);
9         System.out.println(v1.c);
10        System.out.println(v1.dou);
11
12    }
13 }
14 class defValue{
15     int i;
16     String name;
17     char c;
18     double dou;
19
20 }
```

Console

<terminated> ExeProgram (2) [Java Application] E:\New folder\Ecllips\jre\bin\javaw.exe (Jan 14, 2022, 10:43:28 PM - 10:43:28 PM)

0
null

0.0

```

1 // Importing File class
2 import java.io.File;
3 // Importing the IOException class for handling errors
4 import java.io.IOException;
5 class cre {
6     public static void main(String args[]) {
7         try {
8             // Creating an object of a file
9             File f0 = new File("D:\\FileOperationExample.txt");
10            if (f0.createNewFile()) {
11                System.out.println("File " + f0.getName() + " is created successfully.");
12            } else {
13                System.out.println("File is already exist in the directory.");
14            }
15        } catch (IOException exception) {

```

```

13     System.out.println("Enter Teacher Age");
14     this.age=s1.nextInt();
15     System.out.println("Enter Teacher Address");
16     this.address=s1.next();
17 }
18 public void showTeacherData()
19 {
20     System.out.println("Teacher Name: "+Name);
21     System.out.println("Teacher Age: "+age);
22     System.out.println("Teacher Address: "+address);
23 }
24 }
25 class Writer extends Teacher{
26     protected String Name,address;
27     protected int books;
28
29
30 public void setWriterData() {
31     System.out.println("Enter Writer Name");
32     this.Name=s1.next();
33     System.out.println("Enter Writer Age");
34     this.books=s1.nextInt();
35     System.out.println("Enter Writer Books");
36     this.address=s1.next();
37 }
38 public void showWriterData()
39 {
40     System.out.println("Writer Name: "+Name);
41     System.out.println("Writer Age: "+books);
42     System.out.println("Writer Address: "+address);
43 }
44
45 }
46
47
48 class Scholar extends Writer{
49
50 }
51
52
53

```

```

1
2 public class Bank {
3
4     private String Name;
5     private int AccNo;
6     private String AccType;
7     private float BalanceAmnt;
8
9     public Bank() {
10         this.Name=null;
11         this.AccNo=0;
12         this.AccType=null;
13         this.BalanceAmnt=0;
14     }
15     public Bank(String Name, int AccNo, String AccType, float BalanceAmnt) {
16         this.Name=Name;
17         this.AccNo=AccNo;
18         this.AccType=AccType;
19         this.BalanceAmnt=BalanceAmnt;
20     }
21
22     public void Deposit(int depAmnt) {
23         if(depAmnt<=0) {
24             System.out.println("Invalid Deposit Amount");
25         }else
26         {
27             BalanceAmnt=BalanceAmnt+depAmnt;
28         }
29     }
30
31     public void withDraw(int drawAmnt) {
32         if(drawAmnt<=0||drawAmnt>BalanceAmnt) {
33             System.out.println("invalid WithDraw Amount");
34         }else
35         {
36             BalanceAmnt=BalanceAmnt-drawAmnt;
37         }
38     }
39
40 }
41

```



```
    return length;
}

public void set_width(float width) {
    if(width<=0.0&&width>20.0) {
        System.out.println("Invalid Entery");
    }else {
        this.width=width;
    }
}

public float get_width() {
    return width;
}

public void cal_Area() {
    area=length*width;
}

public void cal_Peri() {
    peri=(2*(length+width));
}

public void display() {
    System.out.println("Length="+length);
    System.out.println("Width="+width);
    System.out.println("Area="+area);
    System.out.println("Perimeter="+peri);
}
```

Refactor Navigate Search Project Run Window Help



test.java

```
1
2 public class test {
3     int a;
4     double b;
5     char c;
6
7     public static void main(String[] args) {
8         Integer myinteger=5;
9         Double mydouble=(double)44;
10        Character mycharacter='A';
11
12        System.out.println(myinteger);
13        System.out.println(mydouble);
14        System.out.println(mycharacter);
```

Problems @ Javadoc Declaration Console

<terminated> test [Java Application] C:\Program Files\Java\jdk-1

5

44.0

A

```

1 import java.util.*;
2
3 public class Teacher {
4
5     protected String Name,address;
6     protected int age;
7
8     Scanner s1=new Scanner (System.in);
9
10    public void setTeacherData() {
11        System.out.println("Enter Teacher Name");
12        this.Name=s1.next();
13        System.out.println("Enter Teacher Age");
14        this.age=s1.nextInt();
15        System.out.println("Enter Teacher Address");
16        this.address=s1.next();
17    }
18    public void showTeacherData()
19    {
20        System.out.println("Teacher Name: "+Name);
21        System.out.println("Teacher Age: "+age);
22        System.out.println("Teacher Address: "+address);
23    }
24 }
25 class Writer extends Teacher{
26     protected String Name,address;
27     protected int books;
28
29
30    public void setWriterData() {
31        System.out.println("Enter Writer Name");
32        this.Name=s1.next();
33        System.out.println("Enter Writer Age");
34        this.books=s1.nextInt();
35        System.out.println("Enter Writer Books");
36        this.address=s1.next();
37    }
38    public void showWriterData()
39    {
40        System.out.println("Writer Name: "+Name);
41        System.out.println("Writer Age: "+books);
42    }
43 }

```

```

1
2 public abstract class Address {
3
4     protected int HouseNo;
5     protected int StreetNo;
6     protected String City;
7
8     public Address() {
9         this.HouseNo=0;
10        this.StreetNo=0;
11        this.City=null;
12    }
13    public Address(int HouseNo, int StreetNo, String City) {
14        this.HouseNo=HouseNo;
15        this.StreetNo=StreetNo;
16        this.City=City;
17    }
18 }
19
20 class Person extends Address{
21     private String Name;
22
23     public Person() {
24         super();
25         this.Name=null;
26     }
27     public Person(int HouseNo, int StreetNo, String City, String Name) {
28         super(HouseNo,StreetNo,City);
29         this.Name=Name;
30     }
31     public void display() {
32         System.out.println("Name: "+Name);
33         System.out.println("HouseNo: "+HouseNo);
34         System.out.println("StreetNo: "+StreetNo);
35         System.out.println("City: "+City);
36     }
37 }
38

```


M T W T F S

```
    b1.display();  
}
```

```
}
```

```
1
2 public class Student1 {
3
4     private String name;
5
6     public void changeName(String name) {
7         this.name=name;
8     }
9     public void displayName() {
10         System.out.println(name);
11     }
12 }
13 class main {
14     public static void main(String []args) {
15         Student1 s1=new Student1();
16         s1.changeName("John");
17         s1.displayName();
18
19     }
20 }
21
22
```

```

1
2 public class test {
3     int a;
4     double b;
5     char c;
6
7     Integer myinteger=5;
8     Double mydouble=(double)44;
9     Character mycharacter='A';
10
11     public static void main(String[] args){
12         test obj=new test();
13         obj.display();
14     }
15
16     void display() {
17         System.out.println(myinteger);
18         System.out.println(mydouble);
19         System.out.println(mycharacter);
20
21     }
22 }

```

<terminated> test [Java Application] C:\Program Files\Ja

5

44.0

A

Console Project Explorer

```
1 package inheritance;
2
3 public class animal {
4     public void animalsound() {
5         System.out.println("the animal makes sound");
6     }
7 }
8 class cat extends animal{
9
10    public void animalsound() {
11        System.out.println("the cat says meow meow");
12    }
13 }
14 class dog extends animal{
15
16    public void animalsound() {
17        System.out.println("the cat says wow wow");
18    }
19 }
20
21 class main{
22     public void main(String[] args){
23         animal myanimal=new animal();
24         animal mycat=new cat();
25         animal mydog=new dog();
26
27         myanimal.animalsound();
28         mycat.animalsound();
29         mydog.animalsound();
30
31
32     }
33 }
34 |
```




ExeProgram.java Bank.java Rectangle.java Array.java

```
1
2 public class ExeProgram {
3     public static void main(String[] args) {
4         Array a1=new Array();
5         a1.Input();
6         a1.Display();
7         a1.doubleValue();
8         a1.Display();|
9     }
10 }
11
```

```

1 import java.util.*;
2
3 public class Employ {
4     protected String Name;
5     protected int No;
6
7     Scanner s1=new Scanner(System.in);
8     public void inputData() {
9         System.out.println("Enter Employee Name");
10        this.Name=s1.next();
11        System.out.println("Enter Employee Number");
12        this.No=s1.nextInt();
13    }
14    public void show() {
15        System.out.println("Name is:"+Name+"\nNumber is:"+No);
16    }
17
18 }
19 class Manager extends Employ {
20     private String title;
21     private int golfDues;
22
23     public void setData() {
24         System.out.println("Enter Manager Title");
25         this.title=s1.next();
26         System.out.println("Enter Manager GolfDues");
27         this.golfDues=s1.nextInt();
28     }
29     public void showManagerData() {
30         System.out.println("Title is:"+title+"\nDues are:"+golfDues);
31     }
32
33 }
34
35 class Scientist extends Employ{
36     private int publications;
37
38     public void setPub (int pub) {
39         this.publications=pub;
40     }
41     public void showPublication() { ... ..

```

Writable

Smart Insert

1:1:0

⋮

```

1  import java.util.*;
2  public class Array {
3
4
5      int[] arr =new int[5];
6      Scanner s1=new Scanner(System.in);
7
8      public Array() {
9          for(int i=0;i<5;i++) {
10              arr[i]=-1;
11          }
12      }
13
14      public void Input() {
15          for(int i=0;i<5;i++) {
16              System.out.println("Enter value for "+i+" Index");
17              arr[i]=s1.nextInt();
18          }
19      }
20
21      public void Display() {
22          for(int i=0;i<5;i++) {
23              System.out.println("Value on "+i+" index is "+arr[i]);
24          }
25      }
26
27      public void doubleValue() {
28          for(int i=0;i<5;i++) {
29              arr[i]=2*(arr[i]);
30          }
31      }
32  }
33

```

```

1
2 public class Account {
3
4     int AccNo;
5     int salary;
6     double balance;
7
8     public Account() {
9         balance=0;
10    }
11    public Account(int AccNo,int s,double b) {
12        this.AccNo=AccNo;
13        this.salary=s;
14        this.balance=b;
15    }
16    public void withdraw(double amnt) {
17        balance=balance-amnt;
18        System.out.println("Withdraw Amount is"+amnt);
19        System.out.println("Remaingin Balance is"+balance);
20    }
21    public void dispalyc() {
22        System.out.println("Balance : "+balance);
23        System.out.println("Salary is : "+salary);
24        System.out.println("Balance is : "+balance);
25    }
26
27 }
28
29
30 class SavingAcc extends Account{
31     double InterestRate;
32
33     public SavingAcc() {
34         InterestRate=4.5;
35     }
36
37     public SavingAcc(double balance) {
38         super.balance=balance;
39         InterestRate=4.5;
40     }
41
42     public void Calculate(int year) {
43         balance=(balance+((balance*4.5*year)/100));
44     }
45
46 }
47

```

eclipse - Student/src/Rectangle.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer

- Student
 - JRE System Library [JavaSE-13]
 - src
 - (default package)
 - Bank.java
 - ExeProgram.java
 - Rectangle.java

```
1 public class Rectangle {
2
3
4     private float length;
5     private float width;
6     private float area;
7     private float peri;
8
9     public Rectangle() {
10         this.length=0;
11         this.width=0;
12         this.area=0;
13         this.length=0;
14     }
15
16     public Rectangle(float length, float width) {
17         this.length=length;
18         this.width=width;
19     }
20
21     public void set_Length(float length) {
22         if(length<=0.0&&length>20.0) {
23             System.out.println("Invalid Entry");
24         }else
25         {
26             this.length=length;
27         }
28     }
29     public float get_Length() {
30         return length;
31     }
32
33 }
34
35
```

Rectangle - Student/src

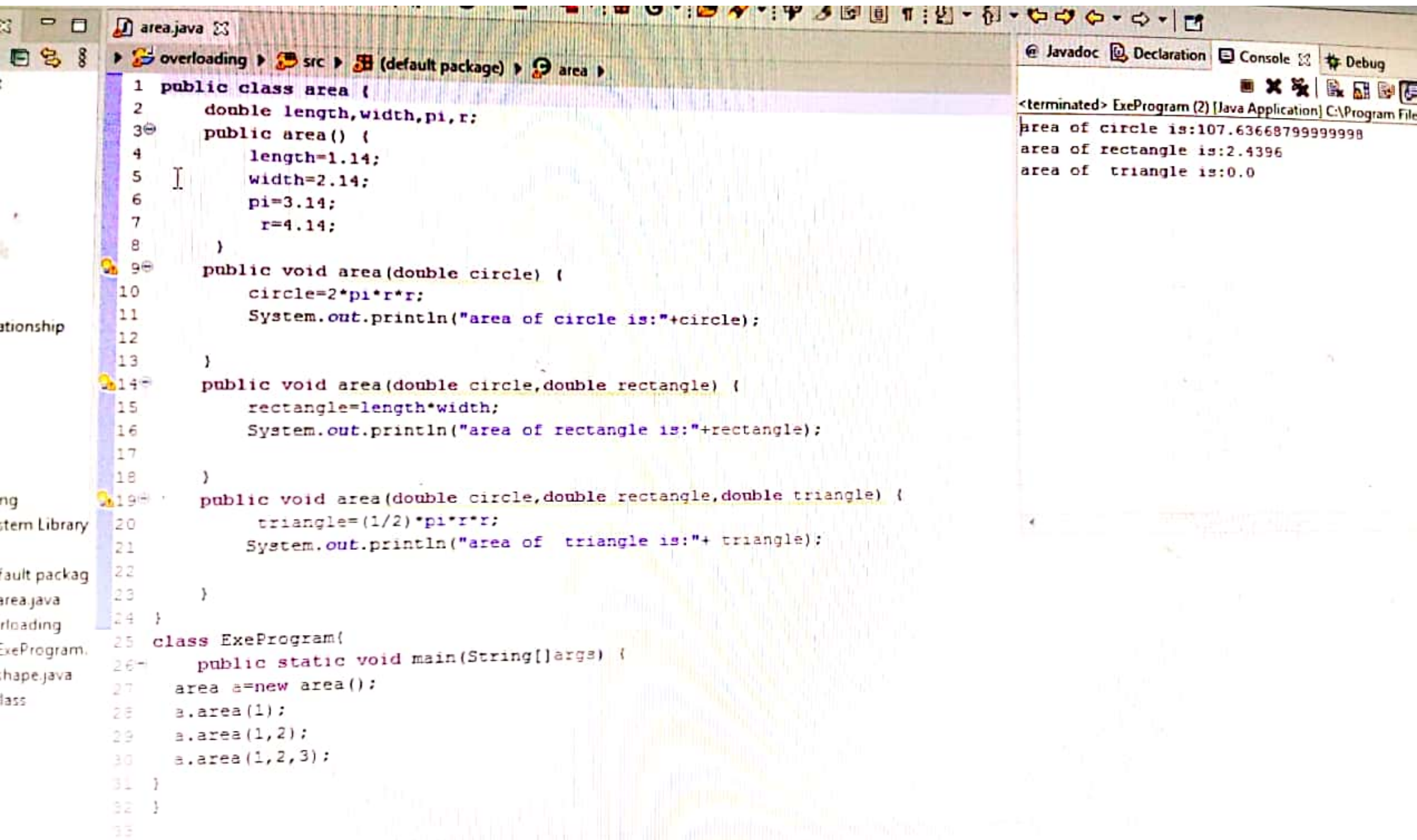
Task List

Find All Activate...

Outline

- Rectangle
 - length : float
 - width : float
 - area : float
 - peri : float
 - Rectangle()
 - Rectangle(float, float)
 - set_Length(float) : void
 - get_Length() : float


```
1 class vehicle{
2     int seats;
3     int tyre;
4     String breaks;
5     public vehicle (int s, int t, String b){
6         seats=s;
7         tyre=t;
8         breaks=b;
9     }
10    void Display(){
11        System.out.println("Seats: "+seats+"\nTyre: "+ tyre+"\nBreaks: "+ breaks);
12    }
13 }
14 public class car extends vehicle{
15     String carcolor;
16     String carmodel;
17     public car(int s, int t, String b, String cc, String cm){
18         super(s,t,b);
19         this.carcolor=cc;
20         this.carmodel=cm;
21     }
22     public void setmethod(){
23         carcolor="red";
24         carmodel="sgd7555";
25     }
26     void display(){
27         System.out.println("\n Carcolor= "+ "\n Car Model= "+carmodel);
28     }
29     public static void main(String[] args){
30         car obj=new car(4,4,"yes","blue","sgd7555");
31         obj.Display();
32         obj.display();
33     }
34 }
```



- Pprogram
 - JRE System Library [JavaSE-13]
 - src
 - (default package)
 - Address.java
 - Array.java
 - Bank.java
 - Car.java
 - DefValue.java
 - Distance.java
 - ExeProgram.java
 - D
 - ExeProgram
 - LinkedList.java
 - Rectangle.java
 - Student.java
 - Student1.java
 - DefValue.java
- Praactical
- Revision

```
1 public class ExeProgram {
2
3
4 public static void main(String args[]) {
5
6     D d1=new D();
7     System.out.println(d1.str);
8     System.out.println(d1.n);
9     System.out.println(d1.l);
10
11
12 }
13 }
14 class D{
15     String str;
16     int n;
17     long l;
18     short s;
19     double d;
20     boolean b;
21 }
```

Console

<terminated> ExeProgram (2) [Java Application] E:\New folder\Eclips\jre\bin\javaw.exe (Jan 17, 2022, 7:02:14 PM – 7:02:15 PM)
null
0
0

```
Public car (String dir)  
{
```

```
Scanner input = new Scanner (System.in);  
System.out.println("Enter direction");  
dir = input.next();  
}
```

```
public void move (int pos)  
{
```

```
Scanner input = new Scanner (System.in);  
System.out.println("Enter position");  
pos = input.nextInt();  
}
```

```
}
```



```
public void Deposit(int depAmt) {
```

```
    if (depAmt <= 0) {
```

```
        System.out.println("Invalid Deposit Amount");
```

```
    } else
```

```
    {
```

```
        BalanceAmt = BalanceAmt + depAmt;
```

```
    }
```

```
}
```

```
public void withdraw(int drawAmt) {
```

```
    if (drawAmt <= 0 || drawAmt > BalanceAmt) {
```

```
        System.out.println("Invalid Withdraw Amount");
```

```
    } else
```

```
    {
```

without ques

```
        BalanceAmt = BalanceAmt - drawAmt;
```

```
    }
```

```
}
```

```
}
```

Exe program

```
public class ExeProgram {
```

```
    public static void main (String[] args) {
```

```
        Bank b1 = new Bank(" HBL", 0412, " Current AC", 5
```

```
            b1. Deposit(2000);
```

```
            b1. display();
```

```
            b1. withdraw(1000);
```



```
1
2 public class Car {
3
4     protected String name;
5
6     //Default constructor
7     public Car() {
8
9         name = null;
10
11     }
12
13
14     //Argument constructor
15     public Car(String name) {
16
17         this.name = name;
18
19     }
20
21
22     //output displaying method
23     public void displayName() {
24
25         System.out.println("Name is: " + name);
26
27     }
28
29 }
30 }
```

```
1
2 public class Execute {
3
4     public static void main(String[] args) {
5         Toyota toyota = new Toyota();           //calling default constructor.
6         toyota.display();
7
8
9         Toyota toyota2 = new Toyota("FastRacing", 2021, "Blue");
10        //calling argument constructor
11
12        toyota2.display();
13
14    }
15
16 }
17 {
```

```
10 public account(int accno,int s,double b){
11     this.accno=accno;
12     salary=s;
13     balance=b;
14 }
15
16 void withdraw(double amnt) {
17     balance=balance-amnt;
18     System.out.println("withdraw amount is" +amnt);
19     System.out.println("remaining balance is" +balance);
20 }
21
22 public void displayc() {
23     System.out.println("balance" +balance);
24     System.out.println("salary" +salary);
25     System.out.println("accountno=" +accno);
26 }
27 }
28
29 class SavingAcc extends account{
30     double IntrestRate;
31
32     public SavingAcc(){
33         IntrestRate=4.5;
34     }
35     public void SavingAcc(double balance){
36         super.balance=balance;
37         IntrestRate=4.5;
38     }
39     public void calculate(int year) {
40         balance=(balance+((balance*4.5*year)/100));
41     }
42 }
43
44 class MonthlySavingAcc extends SavingAcc{
45     double averagebalance;
46
47     public MonthlySavingAcc(){
48         averagebalance=100;
49     }
50     public MonthlySavingAcc(double averagebal){
51         averagebalance=averagebal;
52     }
53
54     public void Display() {
55         System.out.println("accountno=" +accno);
56         System.out.println("salary=" +salary);
57         System.out.println("balance=" +balance);
58         System.out.println("Intrest Rate =" +IntrestRate);
59         System.out.println("average monthly balance" +averagebalance);
60     }
61 }
62 }
63
64
65
```



Console house.java room.java *teacher.java *vehicle.java

```
1 package revision;
2
3 public class teacher {
4     String name;
5     int age;
6     double salary;
7     String qualification;
8     boolean marriageStatus;
9
10    void setmethod(int age,String n,double sal,String qual,boolean MS) {
11        name=n;
12        age=age;
13        salary=sal;
14        qualification=qual;
15        marriageStatus=MS;
16    }
17    void display() {
18        System.out.println("name" +name);
19        System.out.println("age" +age);
20        System.out.println("salary" +salary);
21        System.out.println("qualification" +qualification);
22        System.out.println("marriageStatus" +marriageStatus);
23    }
24 }
25
26 class student extends teacher{
27     String semester="sem";
28
29     void displaydata() {
30         System.out.println("S.semester" +semester);
31     }
32
33     public static void main(String[] args)
34     {
35         student S=new student();
36         S.display();
37     }
38 }
```



<terminated> room [Java Application] D:\JDK And Eclipse\bin\javaw.exe (Jan 25, 2022, 8:13)

```
room type isVIP
20.5
YES
```




*Untitled - Notepad

File Edit Format View Help

```
String S;  
if(machine==true){  
S="YES";  
}else  
{  
S="NO";  
}  
System.out.println(S);|
```

```
1
2 public class ExeProgram {
3
4     public static void main(String[] args) {
5
6
7
8     BubbleSort s1=new BubbleSort();
9     s1.Sort();
10
11
12
13     }
14 }
15
```

Console

<terminated> ExeProgram [Java Application] E:\New folder\Ecllips\jre\bin\javaw.exe (Jan 17, 2022, 12:24:50 AM – 12:24:50 AM)

```
1
2
3
4
5
6
7
7
9
```

<

Writable

Smart Insert

13:6:1

```

// Package bank-account;
// import java.util.Scanner;
public class Bank-Account
{
    final String name, acc-type;
    String d-name;
    final int account-num;
    int bank-bal;
    Public Bank-Account ()
    {
        name = "UBaid";
        acc-type = "Saving";
        d-name = "Adeel";
        account-num = 3415 976;
        bank-bal = 150000;
    }
    void 15000deposit (int amount)
    {
        bank-bal += amount;
        String study
    }
    void withdraw (int amount)
    {
        bank-bal -= amount;
    }
    void Display ()
    {
        System.out.println ("Account Name is : " + name);
        // System.out.println ("your name is : " + d-name);
        System.out.println ("your bank balance : " + bank-bal);
    }
}

```

```

class Car
{
    public String name, dir;
    public int pos;
    public Car()
    { Initialize the values
        Scanner input = new Scanner (System.in)
        System.out.println ("Enter name");
        name = input.next();
        System.out.println ("Enter direction");
        dir = input.next();
        System.out.println ("Enter position");
        pos = input.nextInt();
    }

    switch (dir)
    {
        case 'N':
        case 'E':
        case 'S':
        case 'W':
        }
        pos = 'E';
        break;
        case 'E':
        pos = 'S';
        break;
        case 'S':
        pos = 'W';
        break;
        case 'W':
        pos = 'N';
        break;
        default:
        System.out.println ("Invalid");
        break;
    }
}

```

```
public class BubbleSort {  
    private int[] arr= {7,3,2,1,5,4,7,9};  
  
    public void Sort() {  
        for(int i=8;i>0;i--) {  
            for(int j=0;j<i-1;j++) {  
                if(arr[j]>arr[j+1]) {  
                    int temp=arr[j];  
                    arr[j]=arr[j+1];  
                    arr[j+1]=temp;  
                }  
            }  
        }  
        for(int i=0;i<8;i++) {  
            System.out.println(arr[i]);  
        }  
    }  
}
```



```

1 package inheritance;
2
3 public class account {
4     int accno;
5     int salary;
6     double balance;
7
8     public account(){
9         balance=0;
10    }
11    public account(int accno,int s,double b){
12        this.accno=accno;
13        salary=s;
14        balance=b;
15    }
16
17    void withdraw(double amnt) {
18        balance=balance-amnt;
19        System.out.println("withdraw amount is" +amnt);
20        System.out.println("remaining balanceis" +balance);
21    }
22
23    public void displayc() {
24        System.out.println("balance" +balance);
25        System.out.println("salary" +salary);
26        System.out.println("accountno=" +accno);
27    }
28 }
29
30 class SavingAcc extends account{
31     double IntrestRate;
32
33     public SavingAcc(){
34         IntrestRate=4.5;
35     }
36     public void SavingAcc(double balance){
37         super.balance=balance;
38         IntrestRate=4.5;
39     }
40     public void calculate(int year) {
41         balance=(balance+((balance*4.5*year)/100));
42     }
43 }
44
45 class MonthlySavingAcc extends SavingAcc{
46     double averagebalance;
47
48     public MonthlySavingAcc(){
49         averagebalance=100;
50     }
51     public MonthlySavingAcc(double averagebal){
52         averagebalance=averagebal;
53     }
54
55     public void Display() {

```

```

1 package P;
2
3 public class Rectangle {
4     double length,width,Area, perimeter;
5     public Rectangle()
6     {
7         length=1;
8         width=1;
9     }
10    public Rectangle(double l,double w)
11    {
12        this.length=l;
13        this.width=w;
14    }
15    void setlength(double l)
16    {
17        if(l>=0.0 && l<=20.0)
18        {
19            this.length=l;
20        }
21        else
22        {
23            System.out.println("Invalid length value");
24        }
25    }
26    void getlength(double l)
27    {
28        this.length=l;
29    }
30    void setwidth(double w)
31    {
32        if(w>=0.0 && w<=20.0)
33        {
34            this.width=w;
35        }
36        else
37        {
38            System.out.println("Invalid value");
39        }
40    }
41    void getwidth(double w)
42    {
43        this.width=w;
44    }
45    void Area()

```

%

[

]

|

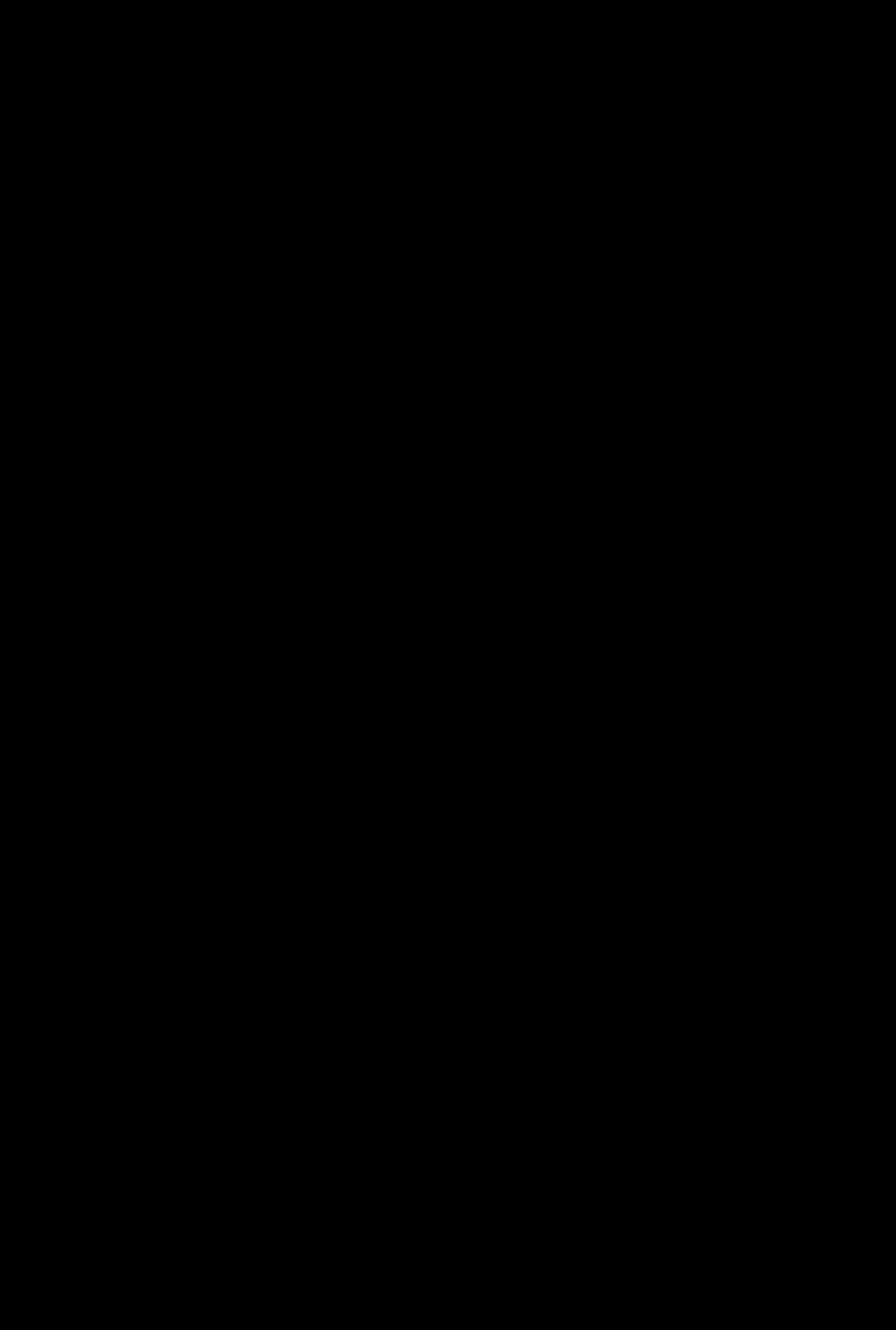
#

=

\$

:





```

22 {
23     System.out.println("Invalid length value");
24 }
25 }
26 void getlength(double l)
27 {
28     this.length=l;
29 }
30 void setwidth(double w)
31 {
32     if(w>=0.0 && w<=20.0)
33     {
34         this.width=w;
35     }
36     else
37     {
38         System.out.println("Invalid value");
39     }
40 }
41 void getwidth(double w)
42 {
43     this.width=w;
44 }
45 void Area()
46 {
47     Area=length*width;
48     System.out.println("Area of Rectangle="+Area);
49 }
50 void perimeter()
51 {
52     perimeter=2*length+2*width;
53     System.out.println("Perimeter of
54 Rectangle="+perimeter);
55 }
56 public static void main(String[] args)
57 {
58     Rectangle r=new Rectangle (1,2);
59     r.setlength(20);
60     r.setwidth(20);
61     r.Area();
62     r.perimeter();
63 }
64 }

```

Q#3 Operator

```
Package Operator;
public class operator
{
    int count;
    operator ()
    {
        count = 2;
    }
    void show ()
    {
        System.out.println (count);
    }
    void overload ()
    {
        count ++;
        System.out.println (count);
    }
    public static void main (String args[])
    {
        Operator op
        Op = new Operator ();
        op.show ();
        op.overload ();
    }
}
```



```

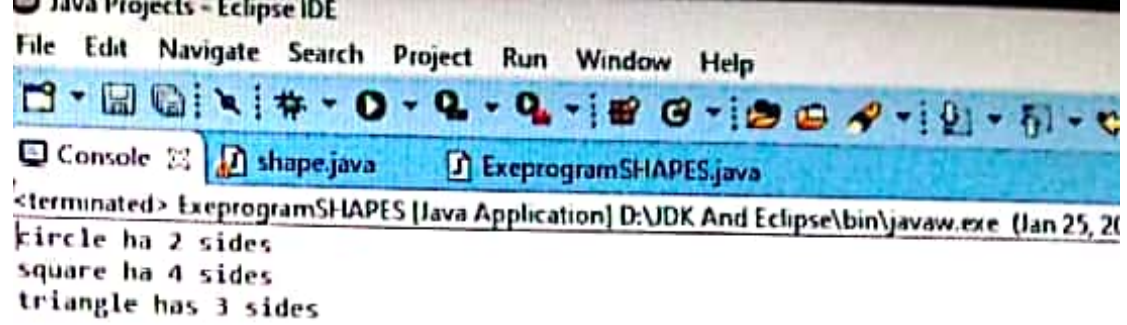
1 package revision;
2
3 public class room {
4     int roomNo;
5     String roomType;
6     double roomArea;
7     boolean machine;
8
9     void setData (int rno, String rt, double area, boolean AC)
10    {
11        roomNo=rno;
12        roomType=rt;
13        roomArea=area;
14        machine=AC;
15    }
16
17    void Display()
18    {
19        System.out.println(+roomNo);
20        System.out.println("room type is"+roomType);
21        System.out.println(+roomArea);
22        String S;
23        if(machine==true) {
24            S="YES";
25        }
26        else
27        {
28            S="NO";
29        }
30        System.out.println(S);
31    }
32
33    public static void main(String[] args)
34    {
35        room room1=new room();
36        room1.setData(5, "VIP",20.5,true);
37        room1.Display();
38    }

```

```

1 package revision;
2
3 public class display {
4
5     public static void main(String[] args)
6     {
7         defValue v1=new defValue();
8         String name;
9         System.out.println(v1.s);
10        System.out.println(v1.i);
11        System.out.println(v1.l);
12        System.out.println(v1.b);
13        System.out.println(v1.c);
14        System.out.println(v1.name);
15        System.out.println(v1.d);
16    }
17 }
18
19     class defValue{
20         short s;
21         int i;
22         long l;
23         boolean b;
24         char c;
25         float f;
26         String name;
27         double d;
28     }

```



I

```
1 package revision;
2
3 public class Streq {
4     public static void main(String[] args)
5     {
6         String n1="A";
7         String n2="A1";
8
9         if(n1==n2) {
10            System.out.println("same strings");
11        }
12        else {
13            System.out.println("not same");
14        }
15    }
16 }
```

```

1
2 public class Distance {
3     private int feet;
4     private float inches;
5
6 public Distance() {
7     feet=0;
8     inches=0;
9 }
10 public Distance(int feet, float inches) {
11     this.feet=feet;
12     this.inches=inches;
13 }
14
15 public void setFeet(int feet) {
16     this.feet=feet;
17 }
18 public int getFeet() {
19     return feet;
20 }
21
22 public void setInches(int inches) {
23     this.inches=inches;
24 }
25 public float getInches() {
26     return inches;
27 }
28
29 public void dist3_sub(Distance d1, Distance d2){
30     Distance d3=new Distance();
31     d3.feet=d1.feet-d2.feet;
32     d3.inches=d1.inches-d2.inches;
33     if(d3.inches<1) {
34         d3.inches=d3.inches+12;
35         d3.feet=d3.feet-1;
36     }
37     System.out.println("D3 feet= "+d3.feet);
38     System.out.println("D3 Inches= "+d3.inches);
39 }
40
41 }
42

```



```

1 |
2 public class Car {
3     protected String name;
4
5     public Car() {
6         name=null;
7     }
8     public Car(String Car) {
9         this.name=name;
10    }
11
12
13 }
14
15 class Toyota extends Car{
16     private String modelNo;
17
18     public Toyota() {
19         super();
20         modelNo=null;
21     }
22
23     public Toyota(String Name,String modelNo) {
24         super(Name);
25         this.modelNo=modelNo;
26     }
27
28     public void Display() {
29         System.out.println("Name : "+name);
30         System.out.println("Model No : "+modelNo);
31     }
32
33
34 }
35

```

```

Public static void main (String args[])
{
    Bank_Account bank = new Bank_Account();
    Scanner input = new Scanner (System.in);
    System.out.println ("Please enter the deposit name");
    bank.d-name = input.next();
    System.out.println ("Please enter an amount
    U want to Deposit");
    bank.deposit = (input.nextln());
    bank.Display ();
    System.out.println ("Please enter an amount
    U want to withdraw");
    bank.withdraw (input.nextInt());
    bank.Display ();
}
}

```

Q4

```

Package localphone;
import java.util.Scanner;
public class local phone
{
    int phone-num;
    Scanner input = new Scanner (System.in);
    void setNum()
    {
        System.out.println ("Please enter your local phoneno.");
        phone-num = input.nextInt();
    }
}

```



```
1
2 public class ExeProgram {
3
4     public static void main(String args[]) {
5
6         String n1="A";
7         String n2="A";
8
9         if(n1==n2) {
10             System.out.println("Same Strings");
11         }else {
12             System.out.println("Not Same");
13         }
14     }
15 }
```

☒ Console

<terminated> ExeProgram [2] [Java Application] E:\New folder\Eclipse\jre\bin\javaw.exe (Jan 14, 2022, 10:51:08 PM - 10:51:09 PM)

Not Same

Bank class

```
public class Bank {
```

```
    private String Name;
```

```
    private int AccNo;
```

```
    private String AccType;
```

```
    private float BalanceAmnt;
```

```
    public Bank() {
```

```
        this.Name = null;
```

```
        this.AccNo = 0;
```

```
        this.AccType = null;
```

```
        this.BalanceAmnt = 0;
```

```
    }
```

```
    public Bank(String Name, int AccNo, String AccType,  
                float BalanceAmnt) {
```

```
        this.Name = Name;
```

```
        this.AccNo = AccNo;
```

```
        this.AccType = AccType;
```

```
        this.BalanceAmnt = BalanceAmnt;Amnt;
```

```
    }
```



```

void Display()
{
    System.out.println("your phone no is: "+ phone-num);
}

```

```

void input()
{
}

```

// creating Natphone as sub class

```

Package localphone;
ShiningStudy.com
public class Natphone extends localphone
{
    int ci-code = 0;

```

```

    void setci-code()
    {
        System.out.println("please enter your city code:");
        ci-code = input.nextInt();
        System.out.println("your city code is 0" + ci-code);
    }
}

```

// creating Intphone as sub class

```

Package localphone;
public class intphone extends Natphone
{
    int co-code;

```


Explorer
s of Inheritance
E System Library (JavaSE
(default package)
HeraricalInheritance
employee.java
morphism
on
nt

employee.java

```
1 package HeraricalInheritance;
2
3 public class employee {
4     float salary;
5 }
6
7 class permanentEmployee extends employee {
8     double hike=0.5;
9 }
10
11 class temporaryEmployee extends employee {
12     double hike=0.25;
13
14     void display() {
15         System.out.println("salary of permanentEmployee")
16         System.out.println("hike for permanentEmployee")
17         System.out.println("salary of temporaryEmployee")
18         System.out.println("hike for temporaryEmployee");
19     }
20 }
21
22 class Main{
23     public static void main(String[] args) {
24         permanentEmployee p=new permanentEmployee();
25         temporaryEmployee t=new temporaryEmployee();
26         t.display();
27     }
28 }
29
```

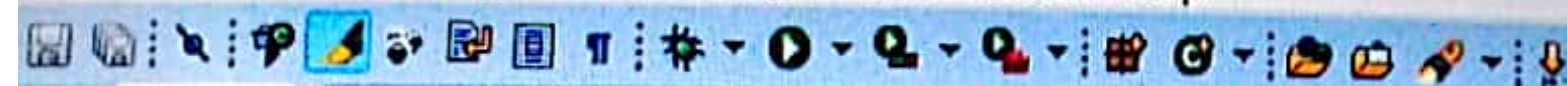
Problems Javadoc Declaration Console

<terminated> display [Java Application] D:\JDK And Eclipse\bin\javaw.exe (Jan 27, 2022, 11:10:28 PM - 1

```
salary of permanentEmployee
hike for permanentEmployee
salary of temporaryEmployee
hike for temporaryEmployee
```

Writable

Smart



Bank
revision
JRE System Libr
src
revision
> display.java
> house.java
> mycode.j
> room.java
> Streq.java
udent

Console room.java house.java

```

1 package revision;
2
3 public class house {
4     room r;
5     void createhouse() {
6         r=new room();
7     }
8     void displayhouse() {
9         r.Display();
10    }
11    public static void main(String[]args) {
12        house h=new house();
13        h.createhouse();
14        h.displayhouse();
15    }
16 }
17 }
18 |
    
```

I

```

void setCo-code ()
{
    System.out.println ("Enter you country code:");
    Co-code = input.nextInt ();
    System.out.println ("your city code is 00" + Co-code);
}

```

```

Public static void main (String args[])
{

```

```

    Intphone inter = new Intphone ();
    Natphone nat = new Natphone ();

```

```

    inter.setCo-code ();
    inter.setCi-code ();

```

```

    nat.setNum ();
    nat.Display ();

```

```

}

```

```

}

```

Cal program

```

import java.util.Scanner
Public class javaapplication
public static void main (String args[])
{

```

```

    car c;
    c = new car ();
    c.move (pos);

```

```

}

```

```

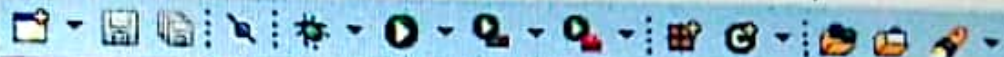
}

```

```
1
2 public class ExeProgram {
3
4     public static void main(String [] args) {
5
6         Distance d1=new Distance(45,10);
7         Distance d2=new Distance(10,4);
8         Distance d3=new Distance();
9         d3.dist3_sub(d1, d2);
10
11     }
12 }
13
14
```

ExeProgram.java Distance.java Address.java

```
1
2 public class ExeProgram {
3
4     public static void main(String [] args) {
5
6         Person p1=new Person(45,12,"Sargodha","ZAIN");
7         p1.display();
8
9     }
10 }
11
```

Console

animal.java

Account.java

<terminated> room [Java Application] D:\JDK And Eclipse\bin\javaw.exe (Jan 25,

seats4

tyre4

breaksyes

carcolorred

carmodelsgd7555

I

```
1
2 public class ExeProgram {
3
4     public static void main(String[] args) {
5         MonthlySavingAcc obj= new MonthlySavingAcc();
6         obj.withdraw(120);
7         obj.dispalyc();
8         obj.Calculate(3);
9         obj.Display();
10
11     }
12 }
13 }
```

Employ.java ExeProgram.java

```
--
11     System.out.println("Enter Employee Number");
12     this.No=s1.nextInt();
13 }
14 public void show() {
15     System.out.println("Name is:"+Name+"\nNumber is:"+No);
16 }
17
18 }
19 class Manager extends Employ {
20     private String title;
21     private int golfDues;
22
23     public void setData() {
24         System.out.println("Enter Manager Title");
25         this.title=s1.next();
26         System.out.println("Enter Manager GolfDues");
27         this.golfDues=s1.nextInt();
28     }
29     public void showManagerData() {
30         System.out.println("Title is:"+title+"\nDues are:"+golfDues);
31     }
32
33 }
34
35 class Scientist extends Employ{
36     private int publications;
37
38     public void setPub (int pub) {
39         this.publications=pub;
40     }
41     public void showPublication() {
42         System.out.println("No of Publications are:"+publications);
43     }
44
45 }
46 class Laborer extends Employ {
47
48 }
49
50
51
```