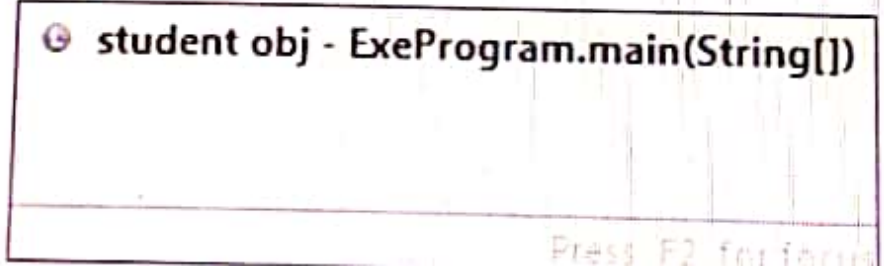
```
1
2  public class student {
3  int rollno=1706;
4  String subj="IT";
5  String Sem="2nd";
6
7⊖  void display() {
8          System.out.println(rollno);
9          System.out.println(subj);
10         System.out.println(Sem);
11     }
12 }
13 class ExeProgram{
14⊖     public static void main(String[]args)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



M T W T F S

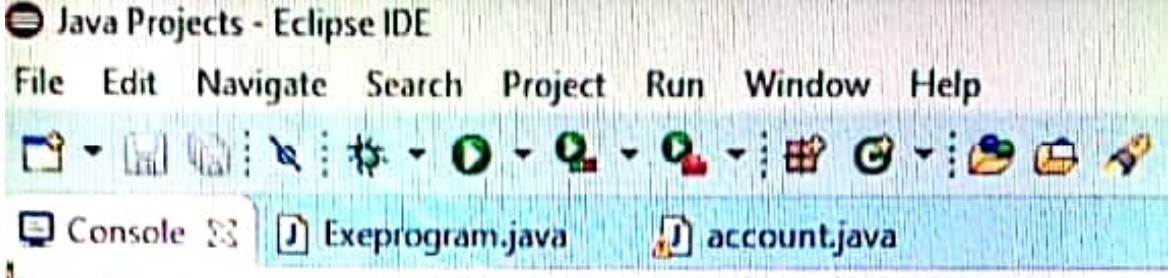
DATE __/__/20__

```
public void Deposite(int depAmnt) {
    if(depAmnt<=0) {
    System.out.println("Invalid Deposite Amount");
} else
{
   BalanceAmnt = BallanceAmnt + depAmnt;
    }
}
public void withDraw(int drawsAmnt) {
    if(drawsAmnt<=0 || drawsAmnt>BalanceAmnt) {
System.out.println("invalid withDraw Amount");
} else
{                                   without gup
  BalanceAmnt = BalanceAmnt - drawsAmnt;
    }
}
}
```

Console | shape.java

```
1
2  public class shape {
3
4      public void shape() {
5   System.out.println("there are many shapes");
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
```

```java
package inheritence;

public class vehicle {
 int seats;
 int tyre;
 String breaks;

 public vehicle(int s,int t,String b) {
seats=s;
tyre=t;
breaks=b;
 }

 void Display() {
      System.out.println("seats: "+seats+"\ntyre: "+tyre+"\nbreaks: "+breaks);
     /* System.out.println("seats" +seats);
      System.out.println("tyre" +tyre);
      System.out.println("breaks" +breaks);*/

 }
}
 class car extends vehicle{
    String carcolor;
    String carmodel;

        public car(int s,int t,String b,String cc,String cm) {
            super(s,t,b);
            this.carcolor=cc;
            this.carmodel=cm;

        }
public void setmethod() {
    carcolor="red";
    carmodel="sgd7555";
}
void display() {
    System.out.println("\n carcolor= "+"\n carmodel= "+carmodel);
    /* System.out.println("carcolor"+carcolor);
     System.out.println("carmodel"+ carmodel);*/
}
}
class Exeprogram{
public static void main(String[]args) {
    car obj=new car(4,4,"yes","red","sgd7555");
    obj.Display();
    obj.display();
}
}
```



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

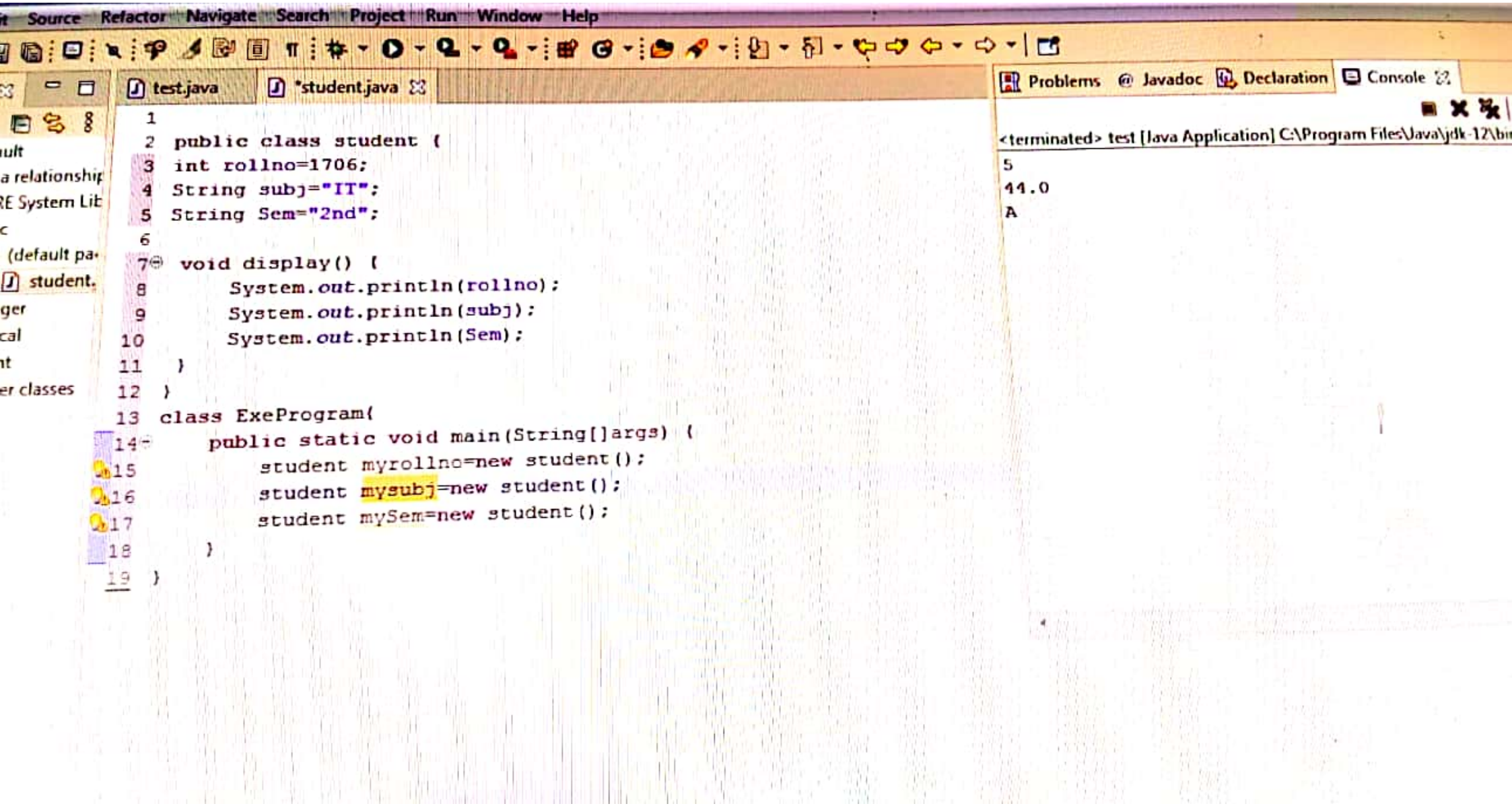
```
withdraw amount is120.0
remaining balanceis-120.0
balance-120.0
salary0
accountno=0
accountno=0
salary=0
balance=-136.2
Intrest Rate =4.5
average monthly balance100.0
```

```
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)

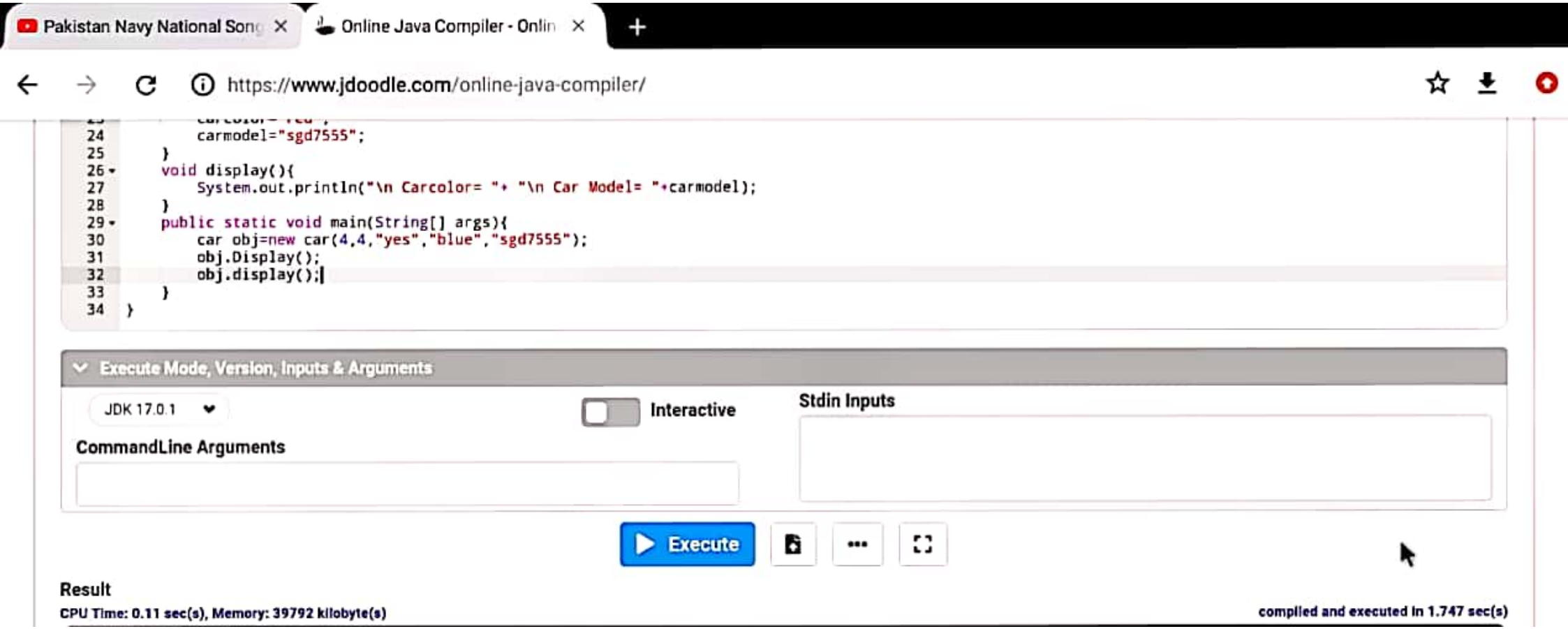
```
Length=15.0
Width=2.0
Area=30.0
Perimeter=34.0
```



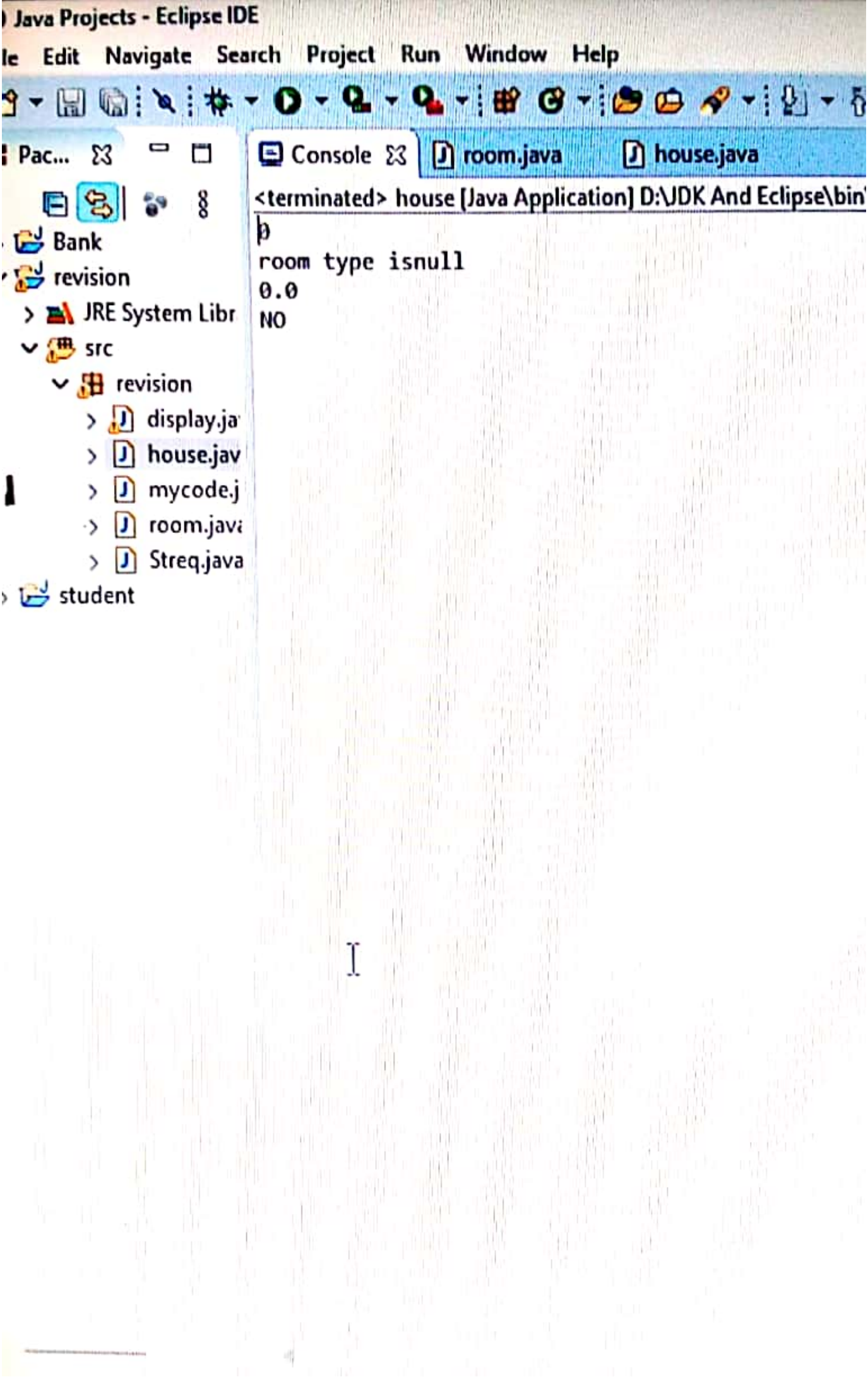
```
1  package revision;
2
3  public class display {
4
5      /*public static void main(String[]args)
6      {
7          defValue v1=new defValue();
8          String name;
9          System.out.println(v1.s);
10         System.out.println(v1.i);
11         System.out.println(v1.l);
12         System.out.println(v1.b);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

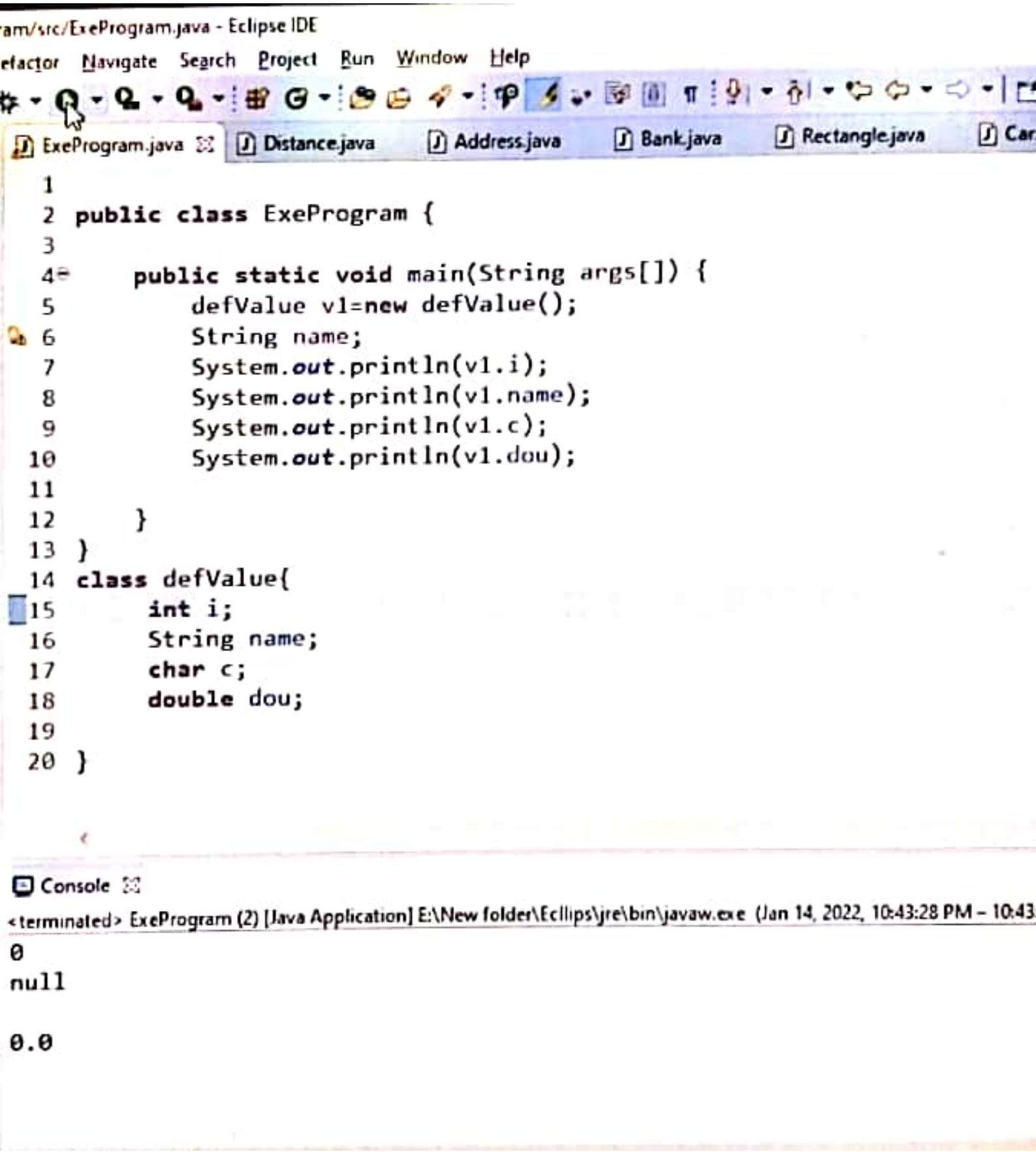
*ExeProgram.java | Bank.java

```
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
```



```
    String tyre = "t";
    String break = "b";
}

void Display ( ) {
    S.O.P ln(+ seats);
    " (+tyre);
    ("break" + break);
}

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 = "BIOI";
}

void display ( ) {
    S.O.P(+carcolor);
    Super ( ).display( );
}
```





```
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) {
```

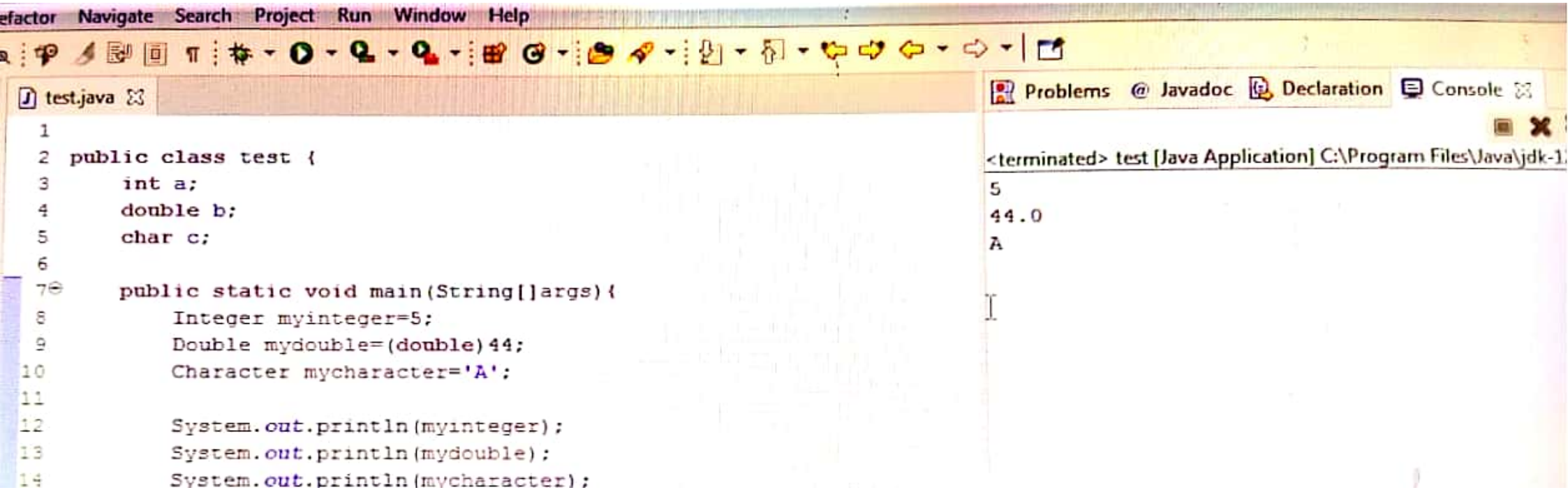
Employ.java | *ExeProgram.java | Teacher.java

```
        System.out.println("Enter Teacher Age");
        this.age=s1.nextInt();
        System.out.println("Enter Teacher Address");
        this.address=s1.next();
    }
    public void showTeacherData()
    {
        System.out.println("Teacher Name: "+Name);
        System.out.println("Teacher Age: "+age);
        System.out.println("Teacher Address: "+address);
    }
}
class Writer extends Teacher{
    protected String Name,address;
    protected int books;


    public void setWriterData() {
        System.out.println("Enter Writer Name");
        this.Name=s1.next();
        System.out.println("Enter Writer Age");
        this.books=s1.nextInt();
        System.out.println("Enter Writer Books");
        this.address=s1.next();
    }
    public void showWriterData()
    {
        System.out.println("Writer Name: "+Name);
        System.out.println("Writer Age: "+books);
        System.out.println("Writer Address: "+address);
    }

}


class Scholar extends Writer{

}
```

Writable | Smart Insert | 51 : 1 : 1150

```java

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;
    }

    public void Deposite(int depAmnt) {
        if(depAmnt<=0) {
            System.out.println("Invalid Deposite Amount");
        }else
        {
            BalanceAmnt=BalanceAmnt+depAmnt;
        }

    }
    public void withDraw(int drawAmnt) {
        if(drawAmnt<=0||drawAmnt>BalanceAmnt) {
            System.out.println("invalid WithDraw Amount");
        }else
        {
            BalanceAmnt=BalanceAmnt-drawAmnt;
        }
    }

    |
}
```

```
    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);
 }
```



```java
import java.util.*;

public class Teacher {

    protected String Name,address;
    protected int age;

    Scanner s1=new Scanner (System.in);

    public void setTeacherData() {
        System.out.println("Enter Teacher Name");
        this.Name=s1.next();
        System.out.println("Enter Teacher Age");
        this.age=s1.nextInt();
        System.out.println("Enter Teacher Address");
        this.address=s1.next();
    }
    public void showTeacherData()
    {
        System.out.println("Teacher Name: "+Name);
        System.out.println("Teacher Age: "+age);
        System.out.println("Teacher Address: "+address);
    }
}
class Writer extends Teacher{
    protected String Name,address;
    protected int books;


    public void setWriterData() {
        System.out.println("Enter Writer Name");
        this.Name=s1.next();
        System.out.println("Enter Writer Age");
        this.books=s1.nextInt();
        System.out.println("Enter Writer Books");
        this.address=s1.next();
    }
    public void showWriterData()
    {
        System.out.println("Writer Name: "+Name);
        System.out.println("Writer Age: "+books);
```

Writable | Smart Insert | 1 : 1 : 0

```java

public abstract class Address {

    protected int HouseNo;
    protected int StreetNo;
    protected String City;

    public Address() {
        this.HouseNo=0;
        this.StreetNo=0;
        this.City=null;
    }
    public Address(int HouseNo, int StreetNo, String City) {
        this.HouseNo=HouseNo;
        this.StreetNo=StreetNo;
        this.City=City;
    }

}
class Person extends Address{
    private String Name;

    public Person() {
        super();
        this.Name=null;
    }
    public Person(int HouseNo, int StreetNo, String City, String Name) {
        super(HouseNo,StreetNo,City);
        this.Name=Name;
    }
    public void display() {
        System.out.println("Name: "+Name);
        System.out.println("HouseNo: "+HouseNo);
        System.out.println("StreetNo: "+StreetNo);
        System.out.println("City: "+City);
    }
}

```

M T W T F S

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

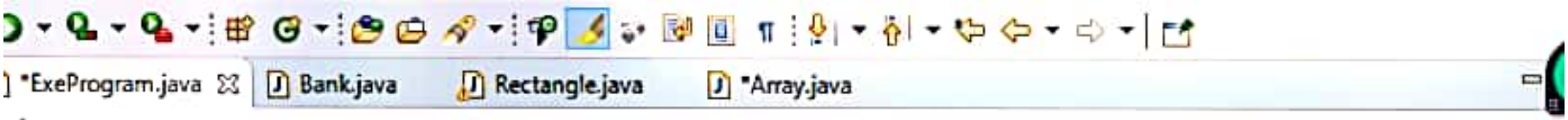
```
1
2  public class Student1 {
3
4      private String name;
5
6      public void changeName(String name) {
7          this.name=name;
8      }
9      public void displayName() {
10         System.out.println(name);
11     }
12 }
13 class main {
14     public static void main(String []args) {
15         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 inheritence;
2
3  public class animal {
4      public void animalsound() {
5          System.out.println("the animal makes sound");
6
7      }
8  }
9  class cat extends animal{
10
11 public void animalsound() {
12     System.out.println("the cat says meow meow");
13 }
14 }
15
16 class dog extends animal{
17
18 public void animalsound() {
19     System.out.println("the cat says wow wow");
20 }
21 }
22  class main{
23      public  void main(String[]args){
24          animal myanimal=new animal();
25          animal mycat=new cat();
26          animal mydog=new dog();
27
28          myanimal.animalsound();
29          mycat.animalsound();
30          mydog.animalsound();
31
32
33      }
34  }
```



*ExeProgram.java | Bank.java | Rectangle.java | *Array.java

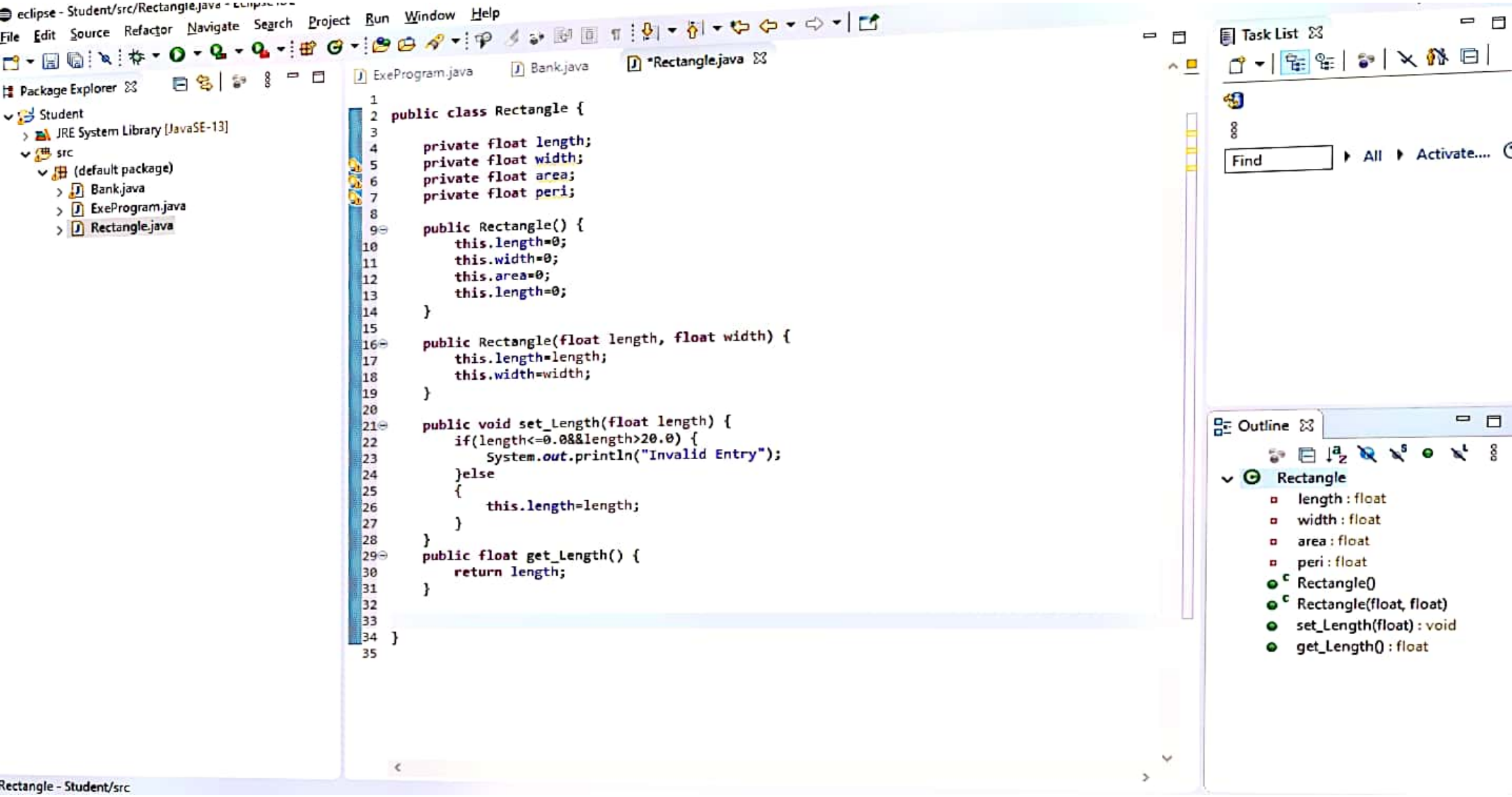
```
1
2  public class ExeProgram {
3⊖  public static void main(String[]args) {
4        Array a1=new Array();
5        a1.Input();
6        a1.Display();
7        a1.doubleValue();
8        a1.Display();
9   }
10 }
11
```

```java
import java.util.*;

public class Employ {
 protected String Name;
 protected int No;

 Scanner s1=new Scanner(System.in);
 public void inputData() {
     System.out.println("Enter Employee Name");
     this.Name=s1.next();
     System.out.println("Enter Employee Number");
     this.No=s1.nextInt();
 }
 public void show() {
     System.out.println("Name is:"+Name+"\nNumber is:"+No);
 }

}
class Manager extends Employ {
    private String title;
    private int golfDues;

    public void setData() {
         System.out.println("Enter Manager Title");
         this.title=s1.next();
         System.out.println("Enter Manager GolfDues");
         this.golfDues=s1.nextInt();
     }
    public void showManagerData() {
         System.out.println("Title is:"+title+"\nDues are:"+golfDues);
     }

}

class Scientist extends Employ{
    private int publications;

    public void setPub (int pub) {
        this.publications=pub;
    }
    public void showPublication() {
```

Writable | Smart Insert | 1 : 1 : 0

```java
import java.util.*;
public class Array {


    int[] arr =new int[5];
    Scanner s1=new Scanner(System.in);

    public Array() {
        for(int i=0;i<5;i++) {
            arr[i]=-1;
            }
     }

     public void Input() {
         for(int i=0;i<5;i++) {
             System.out.println("Enter value for "+i+" Index");
             arr[i]=s1.nextInt();
             }
      }

     public void Display() {
         for(int i=0;i<5;i++) {
             System.out.println("Value on "+i+" index is "+arr[i]);
         }
      }

     public void doubleValue() {
         for(int i=0;i<5;i++) {
             arr[i]=2*(arr[i]);
         }
      }
}

```

```java

public class Account {

    int AccNO;
    int salary;
    double balance;

    public Account() {
        balance=0;
    }
    public Account(int AccNO,int s,double b) {
        this.AccNO=AccNO;
        this.salary=s;
        this.balance=b;
    }
    public void withdraw(double amnt) {
        balance=balance-amnt;
        System.out.println("WithDraw Amount is"+amnt);
        System.out.println("Remaingin Balance is"+balance);
    }
    public void dispalyc() {
        System.out.println("Balance : "+balance);
        System.out.println("Salary is : "+salary);
        System.out.println("Balance is : "+balance);
    }

}


class SavingAcc extends Account{
    double InterestRate;

    public SavingAcc() {
        InterestRate=4.5;
    }

    public SavingAcc(double balance) {
        super.balance=balance;
        InterestRate=4.5;
    }

    public void Calculate(int year) {
        balance=(balance+((balance*4.5*year)/100));
    }

}
```



Pakistan Navy National Song | Online Java Compiler - Onlin

https://www.jdoodle.com/online-java-compiler/

```java
class vehicle{
    int seats;
    int tyre;
    String breaks;
    public vehicle (int s, int t, String b){
        seats=s;
        tyre=t;
        breaks=b;
    }
    void Display(){
        System.out.println("Seats: "+seats+"\nTyre: "+ tyre+"\nBreaks: "+ breaks);
    }
}
public class car extends vehicle{
    String carcolor;
    String carmodel;
    public car(int s, int t, String b, String cc, String cm){
        super(s,t,b);
        this.carcolor=cc;
        this.carmodel=cm;
    }
    public void setmethod(){
        carcolor="red";
        carmodel="sgd7555";
    }
    void display(){
        System.out.println("\n Carcolor= "+ "\n Car Model= "+carmodel);
    }
    public static void main(String[] args){
        car obj=new car(4,4,"yes","blue","sgd7555");
        obj.Display();
        obj.display();
    }
}
```

area.java

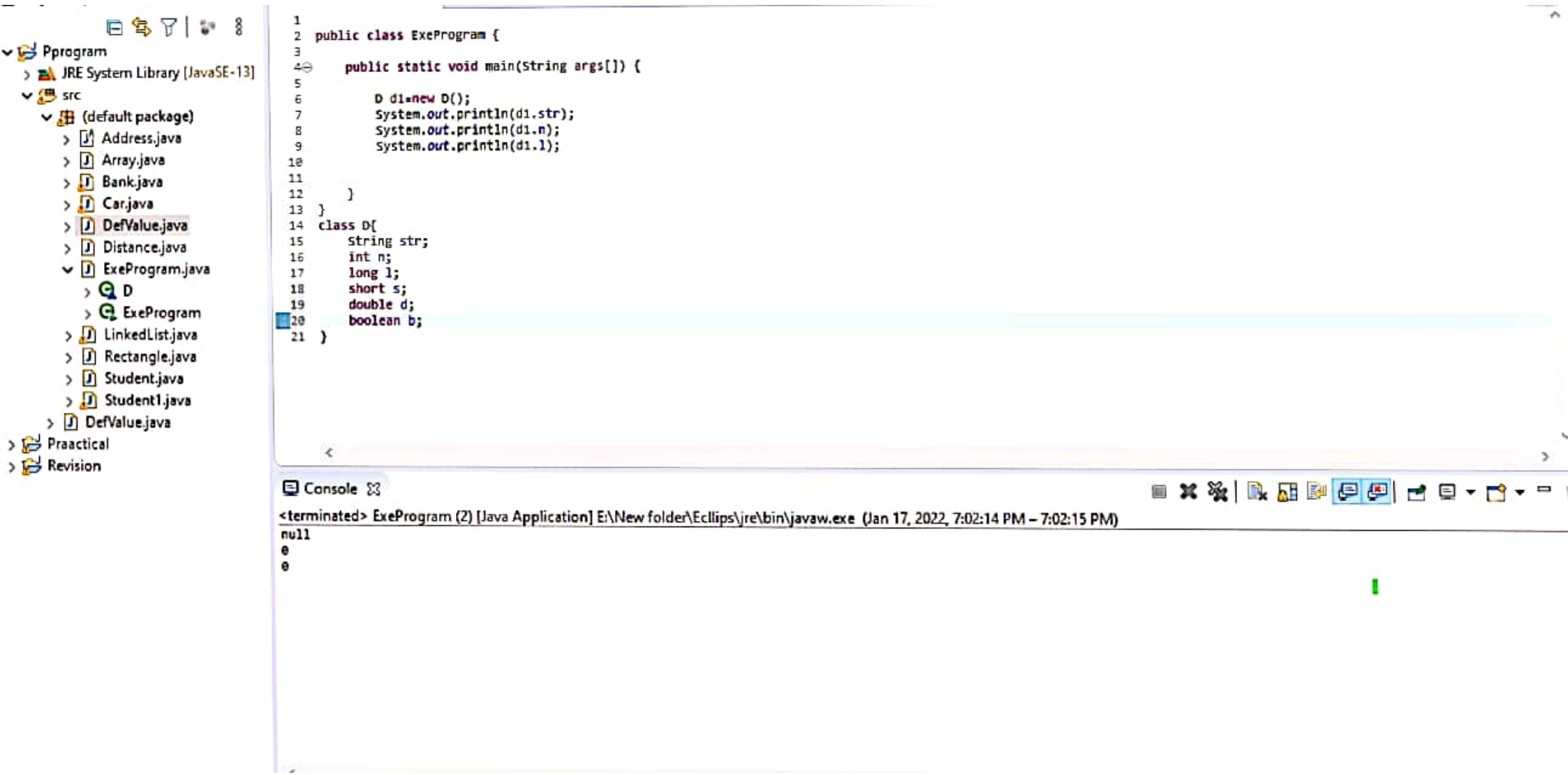
overloading ▸ src ▸ (default package) ▸ area ▸

```
1  public class area {
2      double length,width,pi,r;
3      public area() {
4          length=1.14;
5          width=2.14;
6          pi=3.14;
7           r=4.14;
8       }
9      public void area(double circle) {
10         circle=2*pi*r*r;
11         System.out.println("area of circle is:"+circle);
12
13     }
14     public void area(double circle,double rectangle) {
15         rectangle=length*width;
16         System.out.println("area of rectangle is:"+rectangle);
17
18     }
19     public void area(double circle,double rectangle,double triangle) {
20          triangle=(1/2)*pi*r*r;
21         System.out.println("area of  triangle is:"+ triangle);
22
23     }
24 }
25 class ExeProgram{
26     public static void main(String[]args) {
27   area a=new area();
28   a.area(1);
29   a.area(1,2);
30   a.area(1,2,3);
31 }
32 }
33
```

Javadoc | Declaration | Console | Debug

<terminated> ExeProgram (2) [Java Application] C:\Program File

```
area of circle is:107.63668799999998
area of rectangle is:2.4396
area of  triangle is:0.0
```



```
Public car (string dirc)
  {
  scanner input = new scanner (System.in);
  system.out.println (" Enter direction");
        dirc = input.next ();
  }
  public void move (int pos)
  {
  scanner input = new scanner (System.in);
  system.out.println (" Enter position");
      pos = input.nextInt();
  }

}
```

```
public void Deposite(int depAmnt) {
    if (depAmnt <= 0) {
    System.out.println("Invalid Deposite Amount");
} else
{
   BalanceAmnt = BalanceAmnt + depAmnt;
    }
}
public void withDraw(int drawAmnt) {
      if (drawAmnt <= 0 || drawAmnt > BalanceAmnt ) {
System.out.println("invalid withDraw Amount.");
 } else
 {
   BalanceAmnt = BalanceAmnt - drawAmnt;
    }
 }
}
```

without sup?

Ere program

```
public class EreProgram {
public static void main (String [] args) {
   Bank b1 = new Bank("HBL", 012, "Current AC", 5

   b1.Deposit(2000);
   b1.display();
   b1.withDraw(1000);
```

```java
public class Car {

    protected String name;

    //Default constructor
    public Car() {

        name = null;

    }


    //Argument constructor
    public Car(String name) {

        this.name = name;

    }


    //output displaying method
    public void displayName() {

        System.out.println("Name is: "+ name);

    }

}
```

```
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
```

Console *Accountjava

```
    public account(int accno,int s,double b){
11  this.accno=accno;
12  salary=s;
13  balance=b;
14  }
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);
        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() {
56          System.out.println("accountno=" +accno);
57          System.out.println("salary=" +salary);
58          System.out.println("balance=" +balance);
59          System.out.println("Intrest Rate =" +IntrestRate);
60          System.out.println("average monthly balance" +averagebalance);
61      }
62  }
63
64
65
```

/src/revision/teacher.java - Eclipse IDE

ıctor Navigate Search Project Run Window Help

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 marrigeStatus;
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       marrigeStatus=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("marrigeStatus" +marrigeStatus);
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  }
```

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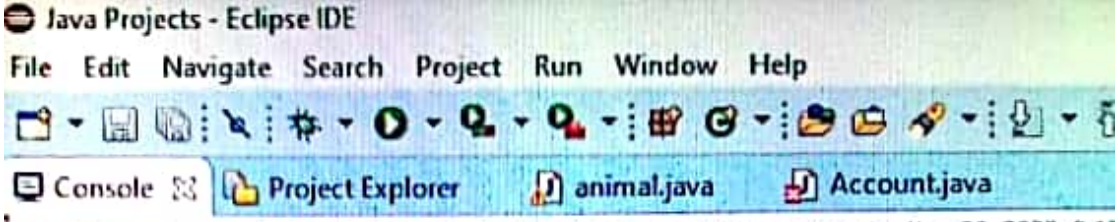
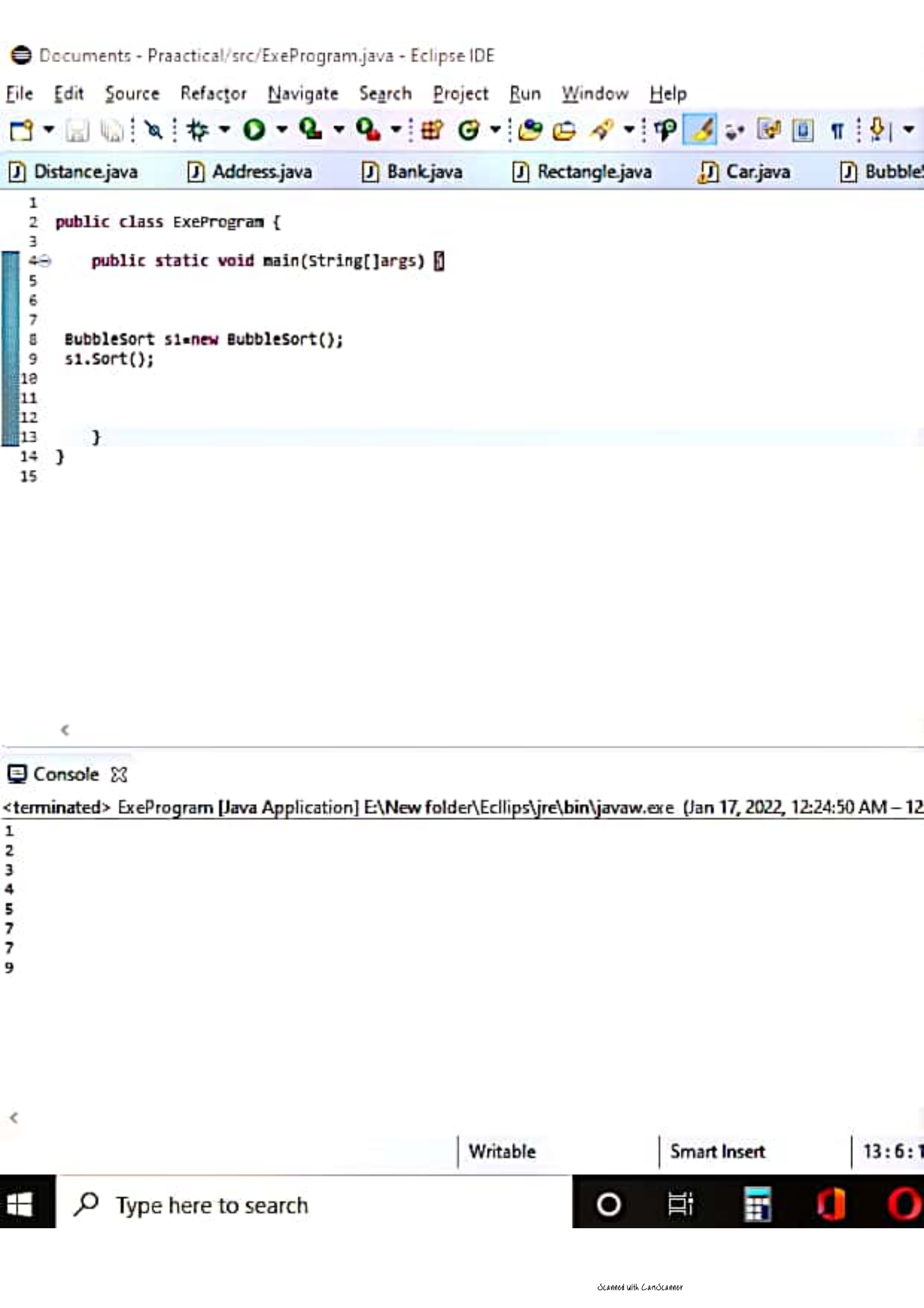


*Untitled - Notepad

File Edit Format View Help

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



```
// 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 = 3415976;
        bank_bal = 150000;
    }
    void deposite (int amount)
    {
        bank_bal += amount;
    }
    Void withdraw (int amount)
    {
        bank_bal -= amount;
    }
    void Display()
    {
    System.out.println("Accord Name is :" + name);
//  System.out.println("your name is:" + d_name);
    System.out.println("your bank balance:" + bank_bal);
    }
```

```
class Car
{
Public String name, dirc;
    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");
    dirc = input.next();
System.out.println("Enter position");
    pos = input.nextInt ();
}
 Switch (dirc)
 {
 case 'N':
   POS = 'E';
   break;
 case 'E':
   POS = 'S';
   break;
 case 'S':
   POS = 'W';
   break;
 case 'W':
   POS = 'N';
   break;
   default :
 System.out.println ("Invalid");
   break;
}
```

```java
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]);
        }
    }
}
```

```java
package inheritence;

public class account {
    int accno;
    int salary;
    double balance;

    public account(){
        balance=0;
    }
    public account(int accno,int s,double b){
    this.accno=accno;
    salary=s;
    balance=b;
}

void withdraw(double amnt) {
    balance=balance-amnt;
    System.out.println("withdraw amount is" +amnt);
    System.out.println("remaining balanceis" +balance);

}
public void displayc() {
    System.out.println("balance" +balance);
    System.out.println("salary" +salary);
    System.out.println("accountno=" +accno);
}
}

class SavingAcc extends account{
    double IntrestRate;

    public SavingAcc(){
        IntrestRate=4.5;
    }
    public void SavingAcc(double balance){
        super.balance=balance;
        IntrestRate=4.5;
    }
    public void calculate(int year) {
        balance=(balance+((balance*4.5*year)/100));
    }
}

class MonthlySavingAcc extends SavingAcc{
    double averagebalance;

    public MonthlySavingAcc(){
         averagebalance=100;
    }
        public MonthlySavingAcc(double averagebal){
        averagebalance=averagebal;
        }

    public void Display() {
```

```
package P;

public class Rectangle {
double length,width,Area, perimeter;
public Rectangle()
{
  length=1;
  width=1;
}
public Rectangle(double l,double w)
{
  this.length=l;
  this.width=w;
}
void setlength(double l)
{
  if(l>=0.0 && l<=20.0)
  {
    this.length=l;
  }
  else
{
    System.out.println("Invalid length value");
  }
}
void getlength(double l)
{
 this.length=l;
}
void setwidth(double w)
{
  if(w>=0.0 && w<=20.0)
  {
    this.width=w;
  }
  else

 System.out.println("Invalid value");


 void getwidth(double w)

 this.width=w;

oid Area()
```

```
    else
{
      System.out.println("Invalid length value");
    }
}
void getlength(double l)
{
 this.length=l;
}
void setwidth(double w)
{
   if(w>=0.0 && w<=20.0)
   {
     this.width=w;
   }
   else
{
   System.out.println("Invalid value");
}
}
   void getwidth(double W)
{
   this.width=w;
}
void Area()
{
   Area=length*width;
   System.out.println("Area of Rectangle="+Area);
}
void perimeter()
{
   perimeter=2*length+2*width;
   System.out.println("Perimeter of
Rectangle="+perimeter);
}
public static void main(String[]args)
{
   Rectangle r=new Rectangle (1,2);
   r.setlength(20);
   r.setwidth(20);
   r.Area();
   r.perimeter();
}
}
```

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();
     }
   }
```

```java
package revision;

public class room {
int roomNo;
String roomType;
double roomArea;
boolean machine;

void setData (int rno, String rt, double area, boolean AC)
        {
        roomNo=rno;
        roomType=rt;
        roomArea=area;
        machine=AC;
        }

void Display()
{
System.out.println(+roomNo);
System.out.println("room type is"+roomType);
System.out.println(+roomArea);
String S;
if(machine==true) {
S="YES";
}
else
{
    S="NO";
}
System.out.println(S);
}

public static void main(String[]args)
{
    room room1=new room();
    room1.setData(5, "VIP",20.5,true);
    room1.Display();
}
```

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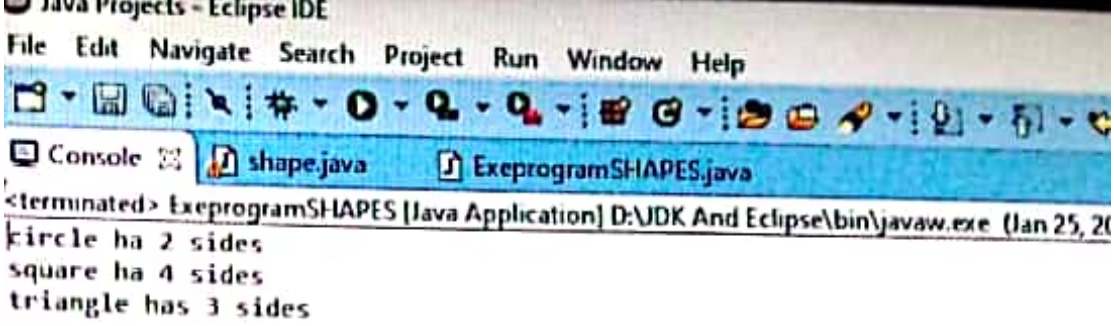
```
1  package revision;
2
3  public class display {
4
5      public static void main(String[]args)
6      {
7          defValue v1=new defValue();
8          String name;
9          System.out.println(v1.s);
10         System.out.println(v1.i);
11         System.out.println(v1.l);
12         System.out.println(v1.b);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



```
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 }
```

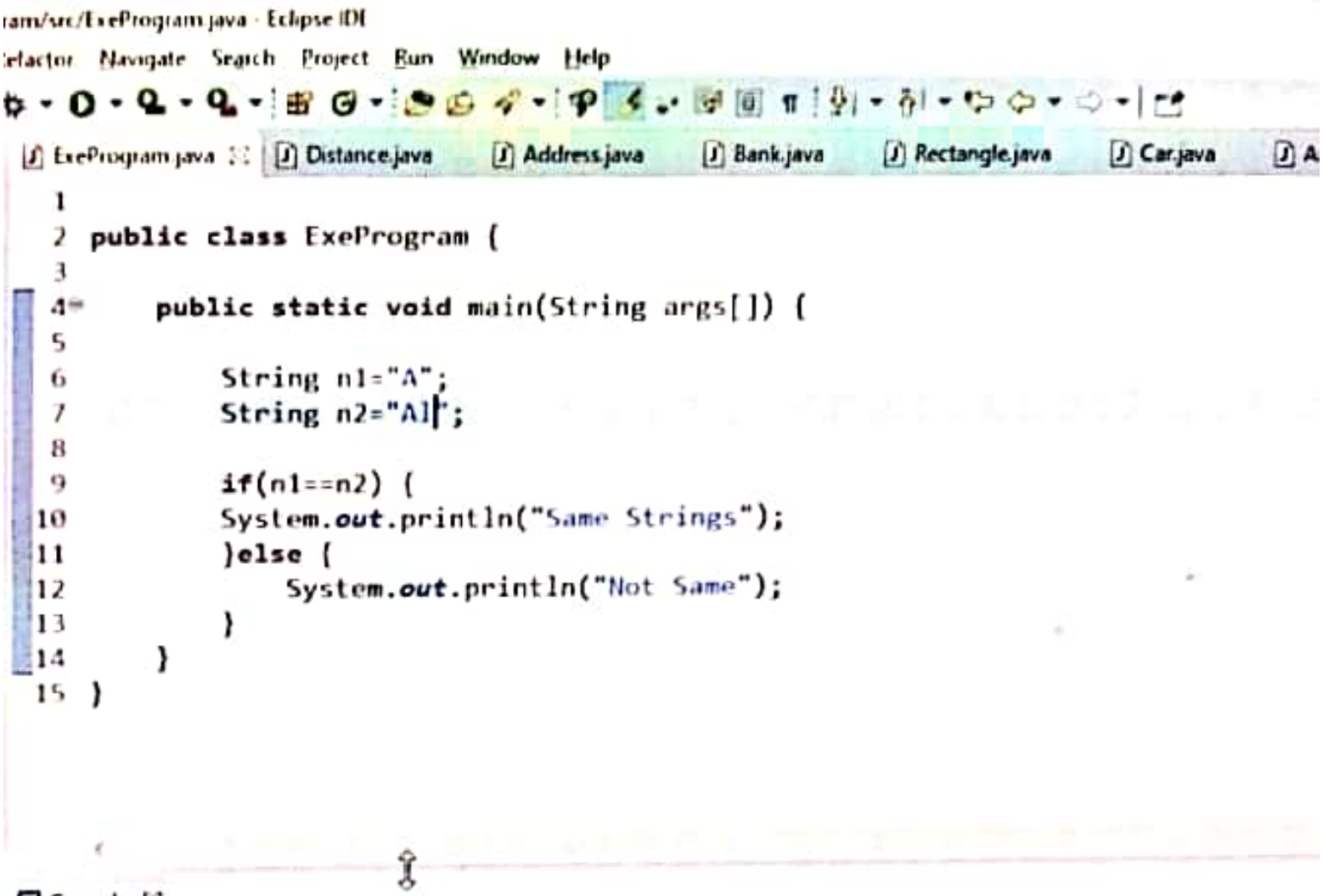
```java

public class Distance {
 private int feet;
 private float inches;

 public Distance() {
     feet=0;
     inches=0;
 }
 public Distance(int feet, float inches) {
     this.feet=feet;
     this.inches=inches;
 }

 public void setFeet(int feet) {
     this.feet=feet;
 }
 public int getFeet() {
     return feet;
 }

 public void setInches(int inches) {
     this.inches=inches;
 }
 public float getInches() {
     return inches;
 }

 public void dist3_sub(Distance d1, Distance d2){
     Distance d3=new Distance();
     d3.feet=d1.feet-d2.feet;
     d3.inches=d1.inches-d2.inches;
     if(d3.inches<1) {
         d3.inches=d3.inches+12;
         d3.feet=d3.feet-1;
     }
     System.out.println("D3 feet= "+d3.feet);
     System.out.println("D3 Inches= "+d3.inches);
 }

}

```

```java

public class Car {
     protected String name;

    public Car() {
        name=null;
    }
    public Car(String Car) {
        this.name=name;
    }


}

class Toyota extends Car{
    private String modelNo;

    public Toyota() {
        super();
        modelNo=null;
    }

    public Toyota(String Name,String modelNo) {
        super(Name);
        this.modelNo=modelNo;
    }

    public void Display() {
        System.out.println("Name : "+name);
        System.out.println("Model No : "+modelNo);
    }


}

```

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

05//

```
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 phone no");
  phone-num = input.nextInt();
}
```

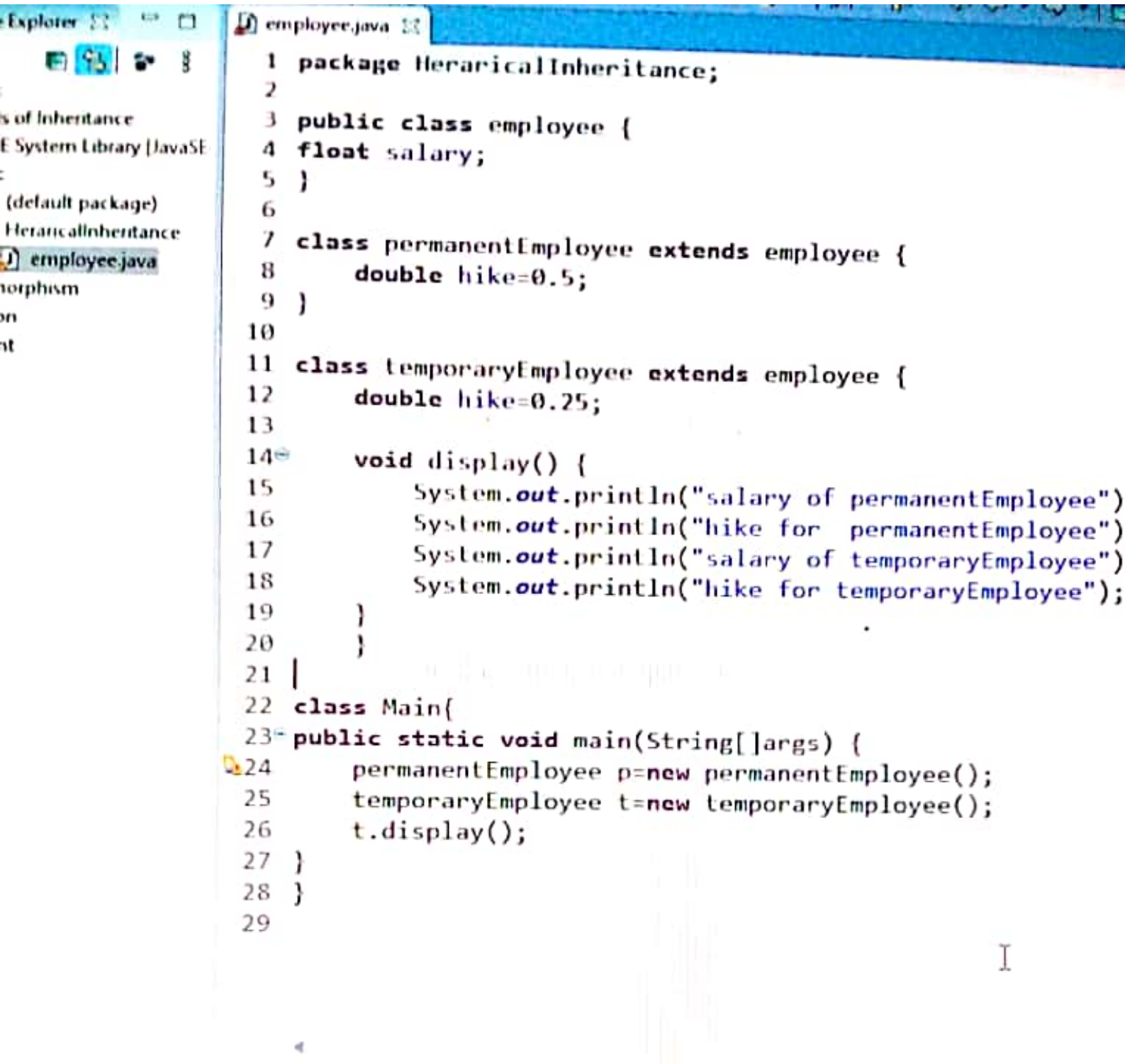


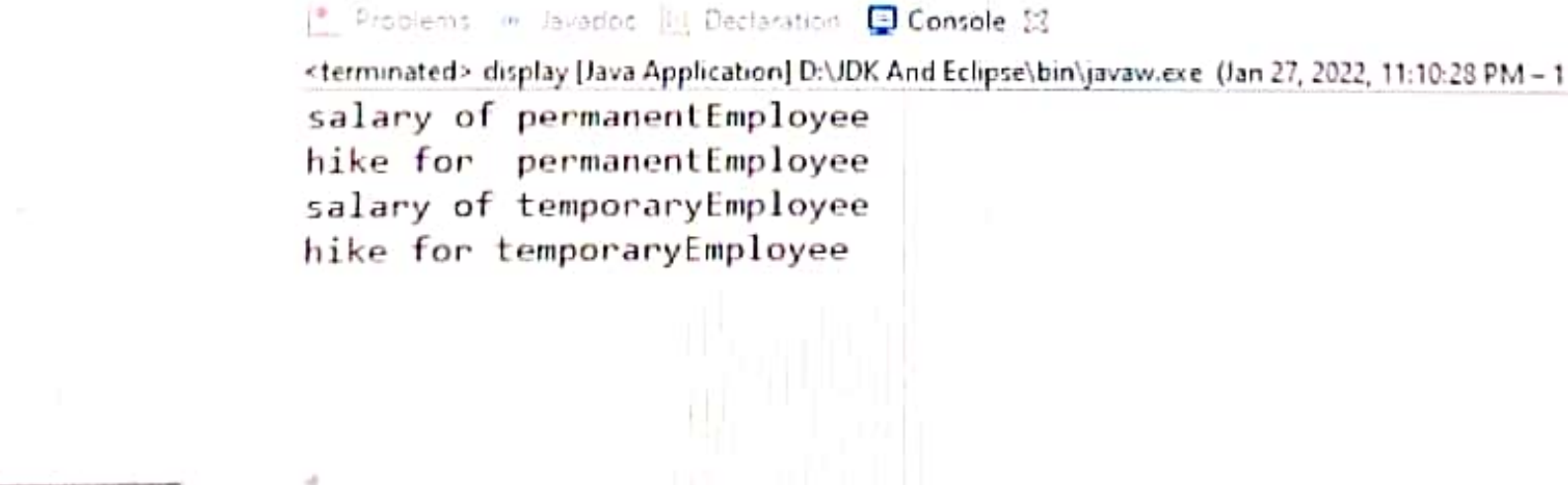
```
}
}
```

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;
    }
```

```
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 (o-code;
```





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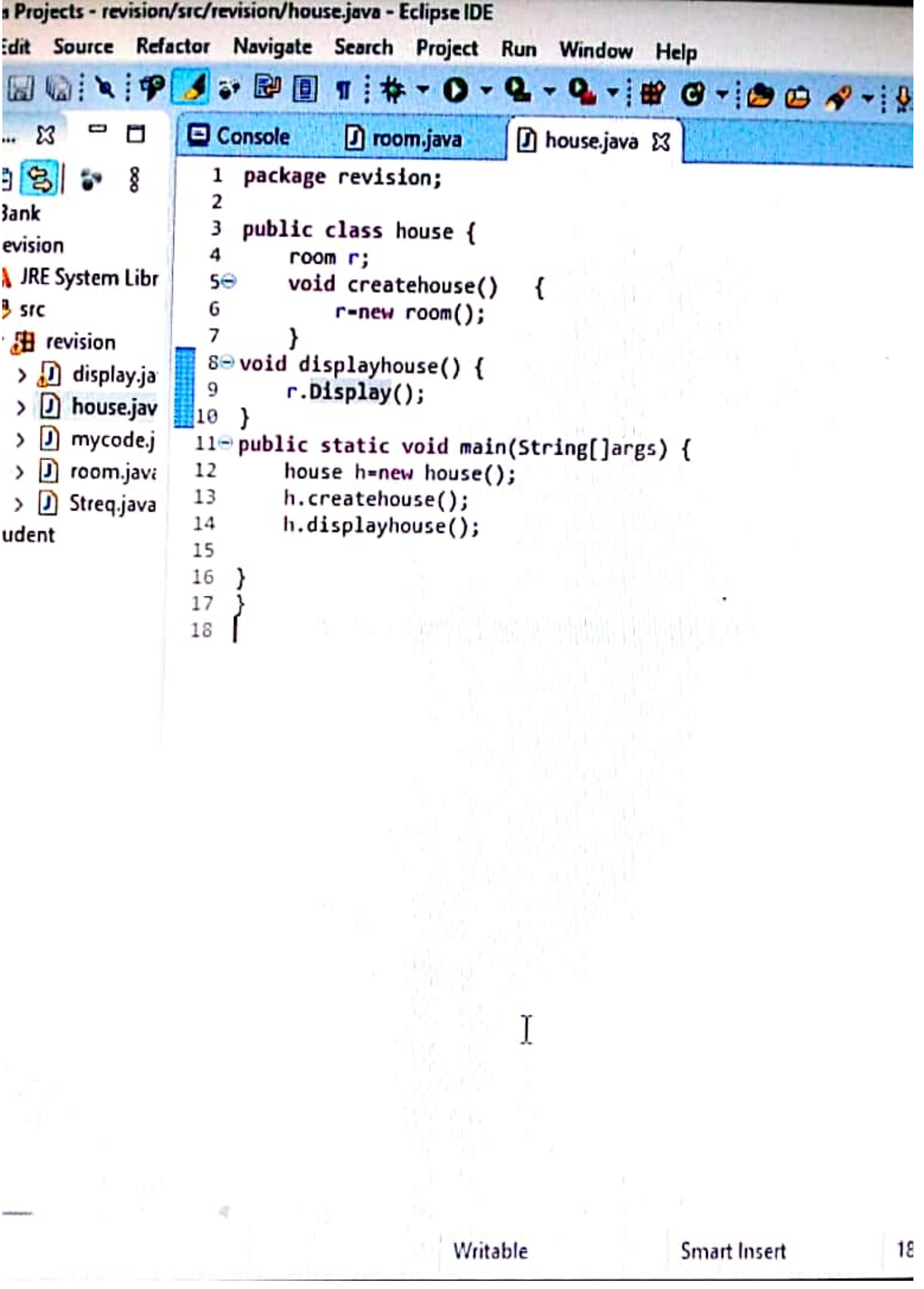


```
void setCo-code()
{
System.out.println("Enter you county code:");
    co-code = input.nextInt();
System.out.println("your city code is 00" +co-code);
}

Public static void main(String args[])
{
  Intphone inter = new Intphone();
  Natphone nat = new Natphone();

    inter.set co-code();
    inter.set ci_code();

    nat.set Num();
    nat.Display();
  }
}
```

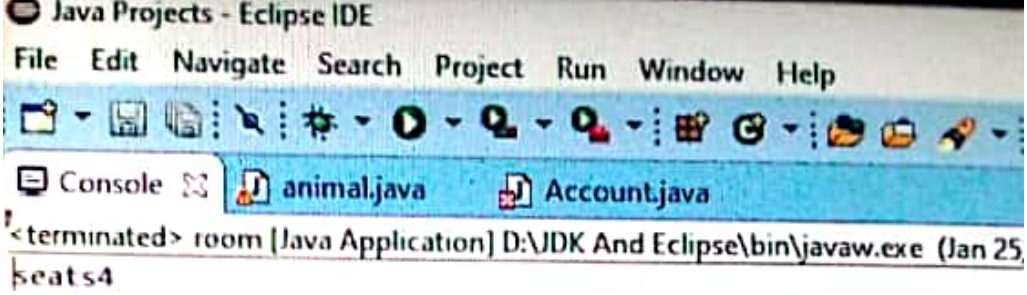
Car program

```
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
```




```
seats4
tyre4
breaksyes
carcolorred
carmodelsgd7555
```

```java

public class ExeProgram {

    public  static void main(String[] args) {
        MonthlySavingAcc obj= new MonthlySavingAcc();
        obj.withdraw(120);
        obj.dispalyc();
        obj.Calculate(3);
        obj.Display();


    }
}
```

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
```