# 12. PROBLEM:

Write a program to show the difference between public and private access specifiers. The program should also show that primitive data types are passed by value and objects are passed by reference and to learn use of final keyword.

# SOURCECODE:

class A

{

public int a;

public int b;

public final int c=5;

A(int p,int q)

{

a=p;

b=q;

}

}

class B extends A

{

B(int x,int y)

{

super(x,y);

}

void display()

{

//c=7;can not assign values to final variable.

System.out.println("a= "+a);

System.out.println("b= "+b);

System.out.println("c= "+c);

}

void sum(int v,int b)

{

int s=b+v;

System.out.println("sum is = "+s);

}

void copy(B ob)

{

a=ob.a;

b=ob.b;

System.out.println("Copy constructor applied: "+a+" "+b);

}

}

public class assignment12

{

public static void main(String args[])

{

B ob1=new B(10,20);

ob1.display();

ob1.sum(20,20);

B ob2=new B(10,10);

ob2.copy(ob1);

}

}

# OUTPUT:

a= 10

b= 20

c= 5

sum is = 40

Copy constructor applied: 10 20

# DISCUSSION:

1.In class A here we create two integer variables ‘a’ and ‘b’ and an final variable ‘c’.we assign values by using constructor.

2.In class B which extends A we display all the variables and also show that the value of a final variable can not be changed.we also use copy constructor in here to show that primitive data types are passed by value and objects are passed by reference.