## **.**

## **Create a class named 'PrintNumber' to print various numbers of different datatypes by creating different methods with the same name 'printn' having a parameter for each datatype.**

class PrintNumber{

    static void printn(boolean a){

        System.out.println(a);

    }

    static void printn(String b){

        System.out.println(b);

    }

    static void printn(int c){

        System.out.println(c);

    }

    static void printn(long d){

        System.out.println(d);

    }

    static void printn(float e){

        System.out.println(e);

    }

    static void printn(char f){

        System.out.println(f);

    }

    static void printn(double g){

        System.out.println(g);

    }

    public static void main(String[]args){

        printn(10);

        printn(27.2f);

        printn(15l);

        printn(55.2);

        printn("Hello");

        printn(true);

        printn('A');

    }

}

## **For example, if the parameters of the first method are of the form (int n, char c), then that of the second method will be of the form (char c, int n).**

class Demo2{

    static void printDemo(int n, char c){

        System.out.println("First print method " +n+" " +c);

    }

    static void printDemo(char a, int b){

        System.out.println("Second print method "  +a+ " " +b);

    }

    public static void main(String[] args){

        printDemo(10,'a');

        printDemo('z',20);

    }

}

## **3.**

## **Create a class to print the area of a square and a rectangle. The class has two methods with the same name but different number of parameters. The method for printing area of rectangle has two parameters which are length and breadth respetively while the other method for printing area of square has one parameter which is side of square.**

class Demo3{

    static void area(int a){

        float sqr = a\*a;

        System.out.println("the area of sqauare is: " +sqr );

    }

    static void area(int b, int c){

        float sqrr = b\*c;

        System.out.println("the area of rectangle is: " +sqrr );

    }

    public static void main(String[] args){

        area(10);

        area(10,20);

    }

}

## **5.Create a class 'Degree' having a method 'getDegree' that prints "I got a degree". It has two subclasses namely 'Undergraduate' and 'Postgraduate' each having a method with the same name that prints "I am an Undergraduate" and "I am a Postgraduate" respectively. Call the method by creating an object of each of the three classes.**

class Degree{

    void getDegree(){

        System.out.println("I got a degree");

    }

}

class Undergraduate extends Degree{

    void getDegree(){

        System.out.println("I am an Undergraduate");

    }

}

class Postgraduate extends Degree{

    void getDegree(){

        System.out.println("I am a Postgraduate");

    }

}

class Demo5{

    public static void main(String[] args){

        Degree d = new Degree();

        Undergraduate u = new Undergraduate();

        Postgraduate p = new Postgraduate();

        d.getDegree();

        u.getDegree();

        p.getDegree();

    }

}

## **Create a class 'Bank' with a method 'getBalance' which returns 0. Make its three subclasses named 'BankA', 'BankB' and 'BankC' with a method with the same name 'getBalance' which returns the amount deposited in that particular bank. Call the method 'getBalance' by the object of each of the three banks.**

class Bank{

    public int getBalance(){

        return 0;

    }

}

class BankA extends Bank{

    public int getBalance(){

        return 1000;

    }

}

class BankB extends Bank{

    public int getBalance(){

        return 1500;

    }

}

class BankC extends Bank{

    public int getBalance(){

        return 2000;

    }

}

class Demo6{

    public static void main(String[] args){

        BankA a = new BankA();

        BankB b = new BankB();

        BankC c = new BankC();

        System.out.println("BankA has balance Rs"+a.getBalance());

        System.out.println("BankB has balance Rs"+b.getBalance());

        System.out.println("BankC has balance Rs"+c.getBalance());

    }

}

## **A class has an integer data member 'i' and a method named 'printNum' to print thevalue of 'i'. Its subclass also has an integer data member 'j' and a method named 'printNum' to print the value of 'j'. Make an object of the subclass and use it to assign a value to 'i' and to 'j'. Now call the method 'printNum' by this object.**

class A{

    static int i;

    static void printNum(int i){

        System.out.println("value of i is: "+i);

    }

}

class B extends A{

    static int j;

    static void printNum(int j){

        System.out.println("value of j is: "+j);

    }

}

class Demo7{

    public static void main(String[] args){

        A a = new A();

        a.printNum(10);

        B b = new B();

        b.printNum(20);

    }

}

## **Suppose a class 'A' has a static method to print "Parent". Its subclass 'B' also has a static method with the same name to print "Child". Now call this method by the objects of the two classes. Also, call this method by an object of the parent class refering to the child class i.e. A obj = new B()**

class A{

    static void printMethod(){

        System.out.println("Parent");

    }

}

class B extends A{

    static void printMethod(){

        System.out.println("Child");

    }

}

class Demo8{

    public static void main(String[] args){

        A a = new A();

        a.printMethod();

        B b = new B();

        b.printMethod();

        A obj = new B();

        obj.printMethod();

    }

}