CODOID-JAVA

**Write a Java program to create and throw custom exceptions?**

class TestException extends RuntimeException

{

}

class A

{

public static void main(String[] args)

{

throw new TestException ();

}

}

**Write a program to demonstrate method overriding?**

class Card

{

public void makepayment(){

System.out.println(“payment done”);

}

}

class Debitcard extends card

{

public void makepayment(){

{

System.out.println(“payment done using debit card”);

}

}

class Creditcard extends card

{

public void makepayment(){

System.out.println(“payment done using Creditcard”);

}

}

class swipMachine

{

public void swipcard(card c){

c.makepayment();

}

}

class Driver

{

public static void main(String[] args){

Debitcard c1=new Debitcard();

Creditcard c2=new Creditcard();

swipMachine m=new swipMachine();

m. swipMachine(c1); //payment done using debitcard

m. swipMachine(c2);// payment done using creditcard

}

}

**Write a Java program that sorts HashMap by value.?**

import java.util.HashMap;

import java.util.set;

class c

{

public static void main(String[] args)

{

HashMap h1=new HashMap();

h1.put(1,”Aakash”);

h1.put(2,”Sathish”);

h1.put(3,”Ram”);

set s=h1.keyset();

for(object i:s)

{

System.out.println(i);

}

}

}

**Write a Java Program for Fibonacci series?**

class F

{

public static void main(String[] args)

{

int n = 10;

int firstNum = 0;

int secondNum = 1;

int nextNum;

System.out.print("Fibonacci Series of " + n + " numbers: ");

for (int i = 1; i <= n; i++)

{

System.out.print(firstNum + " ");

nextNum = firstNum + secondNum;

firstNum = secondNum;

secondNum = nextNum;

}

}

}

**How to check Odd and Even Number in java.**

class L

{

public static void main(String[] args)

{

int i=15 ;

If(i%2==0)

{

System.out.println(i+”is an even number”);

}

else

{

System.out.println(i+”is an odd number”);

}

}

}

**Check no is Armstrong or not in java Program?**

Class R

{

public static void main(String[] args)

{

int num=371;

int num1=num;

int ld;

int count=countDigits(num);

int sum=0;

while(num>0)

{

ld=num%10;

int p=power(ld,count);

sum=sum+p;

num=num/10;

}

if(num1==sum)

{

System.out.println("The given number is armstrong number");

}

else

{

System.out.println("The given number is not a armstrong number");

}

}

public static int countDigits(int a) {

int count=0;

while(a>0)

{

a=a/10;

count++;

}

return count;

}

public static int power(int x,int y) {

int power=1;

for(int i=1;i<=y;i++) {

power=power\*x;

}

return power;

}

}

**Write a program to generate the following output in java?  
\*   
\*\*   
\*\*\*\*   
\*\*\*\*\*   
\*\*\*\*\*\***

import java.util.Scanner;

class O

{

public static void main(String[] args)

{

Scanner sc=new Scanner(System.in);

System.out.println("Enter the number of lines: ");

int n=sc.nextInt();

for(int i=1;i<=n;i++)

{

for(int j=1;j<=i;j++)

{

System.out.print(" \* ");

}

System.out.println();

}

}

}

**Implement method overloading & overriding in java?**

**class** A

{

**public** **void** myMethod(**int** num)

{

System.***out***.println("This is an integer: " + num);

}

**public** **void** myMethod(String str)

{

System.***out***.println("This is a string: " + str);

}

**public** **void** myMethod(**int** num1, **int** num2)

{

System.***out***.println("These are two integers: " + num1 + " and " + num2);

}

}

**How to sort array in java?**

**import** java.util.Arrays;

**class** A3

{

**public** **static** **void** main(String[] args)

{

**int**[] arr = {5, 3, 2, 8, 1, 4};

Arrays.*sort*(arr);

System.***out***.println(Arrays.*toString*(arr));

}

}

**Implement multiple inheritances using an interface?**

**public** **interface** InterfaceA

{

**void** methodA();

}

**public** **interface** InterfaceB

{

**void** methodB();

}

**public** **class** MyClass **implements** InterfaceA, InterfaceB

{

@Override

**public** **void** methodA()

{

// Implementation of methodA

}

@Override

**public** **void** methodB()

{

// Implementation of methodB

}

}

**Constructor Overloading**

**public** **class** E

{

E()

{

System.***out***.println("From constructor 1");

}

E(**int** a)

{

System.***out***.println("From constructor 2");

}

E(**double** a)

{

System.***out***.println("From constructor 3");

}

**public** **static** **void** main(String[] args)

{

E obj1=**new** E(); //From constructor 1

E obj2=**new** E(5); //From constructor 2

E obj3=**new** E(40.8); //From constructor 3

}

}

**Print Multiplication table Program in java**

**public** **class** M

{

**public** **static** **void** main(String[] args)

{

**int** a=5;

**int** b=10;

**for**(**int** i=1;i<=b;i++)

{

**int** mul=a\*i;

System.***out***.println(i+"\*"+a+"="+mul);

}

}

}

**How to create method in java Program**

public class G

{

public static void main(String[] args)

{

int result = sum(2, 3);

System.out.println("The sum of 2 and 3 is: " + result);

}

public static int sum(int num1, int num2)

{

int sum = num1 + num2;

return sum;

}

}

**How to create Method Overriding program in java**

**class** Animal

{

**public** **void** makeSound()

{

System.***out***.println("The animal makes a sound");

}

}

**class** Cat **extends** Animal

{

@Override

**public** **void** makeSound()

{

System.***out***.println("Meow");

}

}

**public** **class** Main

{

**public** **static** **void** main(String[] args)

{

Animal animal = **new** Animal();

Cat cat = **new** Cat();

animal.makeSound(); // The animal makes a sound

cat.makeSound(); // Meow

}

}