***1.exception handling***

Java program of exception handling

import java.util.\*;

public class Main

{

public static void main(String[] args) {

int a,b,c;

Scanner sc=new Scanner(System.in);

System.out.println("Enter 2 no");

a=sc.nextInt();

b=sc.nextInt();

try {

c=a/b;

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

}

catch(ArithmeticException e)

{

System.out.println(e);

}

c=a+b;

System.out.println("Add:" +c);

c=a-b;

System.out.println("Sub:" +c);

c=a\*b;

System.out.println("multi:" +c);

}

}

***Output:***

Enter 2 no

34

0

java.lang.ArithmeticException: / by zero

Add:34

Sub:34

multi:0

***2.Try catch example***

public class Main {

public static void main(String[] args) {

try

{

int arr[]= {1,3,5,7};

System.out.println(arr[10]);

}

catch(ArrayIndexOutOfBoundsException e)

{

System.out.println(e);

}

System.out.println("rest of the code");

}

}

***Output:***

java.lang.ArrayIndexOutOfBoundsException: Index 10 out of bounds for length 4

rest of the code

***3.multiple catch block.***

public class Main {

public static void main(String[] args) {

try

{

int a[]=new int[5];

a[5]=30/0;

}

catch(ArithmeticException e)

{

System.out.println("Arithmetic Exception occurs");

}

catch(ArrayIndexOutOfBoundsException e1)

{

System.out.println("ArrayIndexOutOfBounds Exception occurs");

}

catch(Exception e2)

{

System.out.println("Parent Exception occurs");

}

System.out.println("rest of the code");

}

}

***Output:***

Arithmetic Exception occurs

rest of the code

***4. MultipleCatchBlock***

public class Main {

public static void main(String[] args) {

try{

String s=null;

System.out.println(s.length());

}

catch(ArithmeticException e)

{

System.out.println("Arithmetic Exception occurs");

}

catch(ArrayIndexOutOfBoundsException e)

{

System.out.println("ArrayIndexOutOfBounds Exception occurs");

}

catch(Exception e)

{

System.out.println("Parent Exception occurs");

}

System.out.println("rest of the code");

}

}

***Output:***

Parent Exception occurs

rest of the code

***5.nested try example***

class Main {

public static void main(String args[])

{

try {

int a[] = { 1, 2, 3, 4, 5 };

System.out.println(a[5]);

try {

int x = a[2] / 0;

}

catch (ArithmeticException e2) {

System.out.println("division by zero is not possible");

}

}

catch (ArrayIndexOutOfBoundsException e1) {

System.out.println("ArrayIndexOutOfBoundsException");

System.out.println("Element at such index does not exists");

}

}

}

***Output:***

ArrayIndexOutOfBoundsException

Element at such index does not exists.