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Aim: Implement a program to handle Arithmetic exception, Array Index Out Of Bounds. The user enters two numbers Num1 and Num2. The division of Num1 and Num2 is displayed. If Num1 and Num2 were not integers, the program would throw a Number Format Exception. If Num2 were zero, the program would throw an Arithmetic Exception. Display the exception.

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Program:

import java.util.\*;

public class Exceptions{

public static void main(String[] args){

int num1,num2,result;

Scanner sc = new Scanner(System.in);

try{

System.out.println("Enter First number");

num1 = Integer.parseInt(sc.next());

System.out.println("Enter Second number");

num2 = Integer.parseInt(sc.next());

result = num1/num2;

System.out.println("Division: "+result);

int x[] = new int[12];

x[15] = 10;

System.out.println("x[15] = "+x[15]);

}

catch(ArithmeticException e){

System.out.println("Denominator is zero " + e);

}

catch(NumberFormatException e){

System.out.println("Input is Wrong " + e);

}

catch(ArrayIndexOutOfBoundsException e){

System.out.println("Wrong Index Number " + e);

}

}

}

OUTPUT:

java -cp /tmp/bln6p9wPHV Exceptions

Enter First number56

56Enter Second number

45

5Division: 1

Wrong Index Number java.lang.ArrayIndexOutOfBoundsException: Index 15 out of bounds for length 12