Assignment: 6

Problem Statement: 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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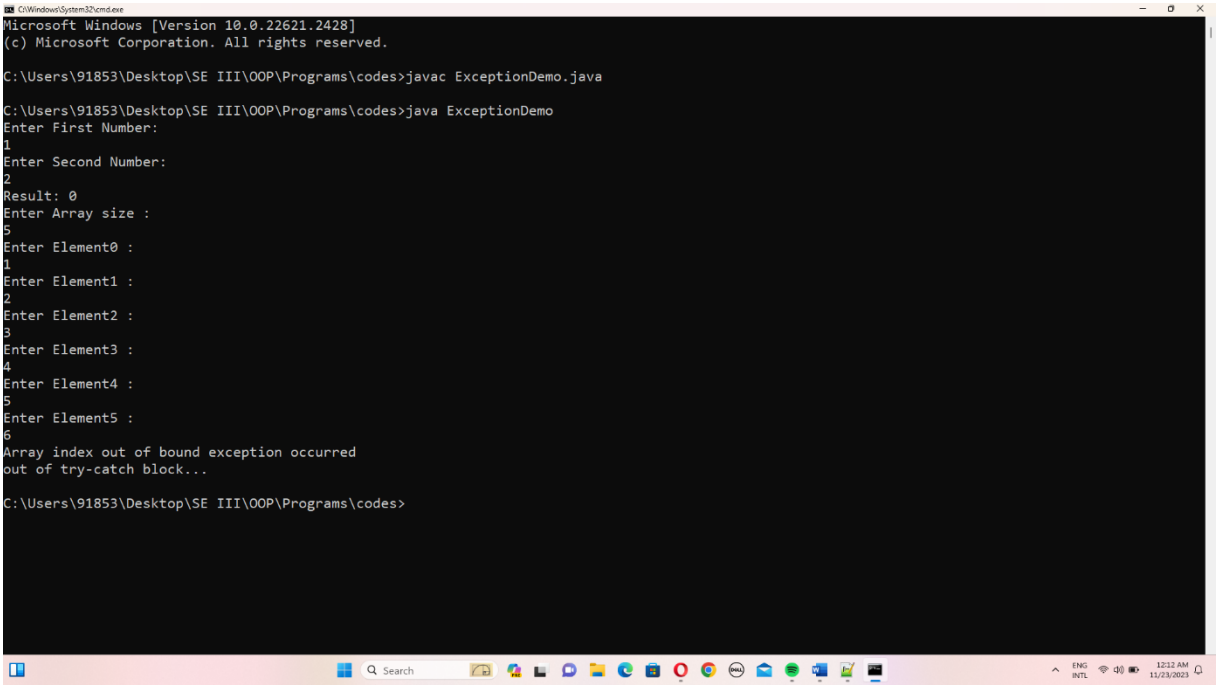
1. ExceptionDemo.java

```
import java.util.Scanner;


public class ExceptionDemo
 {


int num1, num2, div;


Scanner sc=new Scanner(System.in);


public void divByZero()
{


System.out.println("Enter First Number:");
num1=Integer.parseInt(sc.next());


System.out.println("Enter Second Number: ");
num2=Integer.parseInt(sc.next());
```

```
div=num1/num2;
System.out.println ("Result: " + div);
}



public void arrayIndexOutOfBound()

{  int
n;
System.out.println("Enter Array size :");  n=sc.nextInt();

int a[]=new int[n];

for(int i=0; i<=n;i++)
{

System.out.println("Enter Element"+i+" :");  a[i]=sc.nextInt();
 }

}

public static void main(String[] args)
{

ExceptionDemo d=new ExceptionDemo();

try  {
```

```
            d.divByZero();
        d.arrayIndexOutOfBound();

}


catch(ArrayIndexOutOfBoundsException e)
{
 System.out.println("Array index out of bound exception occurred");

} catch (NumberFormatException e)

{

System.out.println("Number format exception occurred");

} catch (ArithmeticException e)

{ System.out.println("Arithmatic exception occurred");

} catch (Exception e)
{
 System.out.println("Exception occurred");

}
            System.out.println("out of try-catch block...");
}

}
============================================================
============
```

Outputs-:


C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.22621.2428]
(c) Microsoft Corporation. All rights reserved.
C:\Users\91853\Desktop\SE III\OOP\Programs\codes>javac ExceptionDemo.java
C:\Users\91853\Desktop\SE III\OOP\Programs\codes>java ExceptionDemo
Enter First Number:
1
Enter Second Number:
2
Result: 0
Enter Array size :
5
Enter Element0 :
1
Enter Element1 :
2
Enter Element2 :
3
Enter Element3 :
4
Enter Element4 :
5
Enter Element5 :
6
Array index out of bound exception occurred
out of try-catch block...
C:\Users\91853\Desktop\SE III\OOP\Programs\codes>
Search