Lab 10 10 July 2023

Questions01

Write a java program that takes two integers as input and performs division on them.Implement exception handling to catch and handle the ArithmeticsException that occurs when dividing by zero.

Print an appropriate error message if the denominator is zero.

```
package com.mycompany.exceptionhadling;
import java.util.Scanner;
public class Exceptionhadling {
 public static void main(String[] args) {
    int no1,no2,ans;
    Scanner sc=new Scanner(System.in);
    try
    {
      System.out.println("Enter first number");
      no1=sc.nextInt();
      System.out.println("Enter Second number");
      no2=sc.nextInt();
      ans=no1/no2;
      System.out.println("Answer is"+ans);
    }
    catch(Exception e)
     System.out.println("Number devided by zero error");
    }
  }
 }
```

Questions02

2)Write a java program that creates an array of integers and attempts to access an index that is out of bounds.Implement exception hadling to catch and handle the arrayIndexOutOfBoundsException.

Print an appropriate error message if an invalid index is accessed

```
public class ArrayExceptionHandling
{
  public static void main(String[] args)
{
    int[] array = {1, 2, 3, 4, 5};
    try {

        // Access an index that is out of bounds
        int value = array[10];
        System.out.println("Value: " + value);
    }
    catch (ArrayIndexOutOfBoundsException e)
{

System.out.println("Error: Invalid index accessed!");
    }
    }
}
```

Questions03

Write a java program that attempts to read a file that does not exist. Implement exception handling to catch and handling the FileNotFoundException.

Print an appropriate error message if the file is not found

```
import java.io.File;
import java.io.FileNotFoundException;
import java.util.Scanner;
public class FileExceptionHandling
{
public static void main(String[] args)
{
String fileName = "nonexistent_file.txt";
try {

File file = new File(fileName);
Scanner scanner = new Scanner(file);

// Read file contents or perform any necessary operations scanner.close();
}

catch (FileNotFoundException e)
{
System.out.println("Error: File not found!");
}
}
```