

```
import java.util.Scanner;

public class ExceptionHandling {

    public static void main(String[] args) {

        Scanner scanner = new Scanner(System.in);

        int[] array = new int[2]; // For simulating ArrayIndexOutOfBoundsException

        try {

            // Getting user input for Num1 and Num2

            System.out.println("Enter Num1:");

            String input1 = scanner.nextLine();

            System.out.println("Enter Num2:");

            String input2 = scanner.nextLine();

            // Parse the inputs as integers, might throw NumberFormatException

            int num1 = Integer.parseInt(input1);

            int num2 = Integer.parseInt(input2);

            // Simulate ArrayIndexOutOfBoundsException

            array[2] = 5; // This will throw an exception as index 2 does not exist

            // Perform division, might throw ArithmeticException

            int result = num1 / num2;

            System.out.println("The result of division is: " + result);
```

```
    } catch (ArithmeticException e) {  
        System.out.println("ArithmeticException: Division by zero is not allowed.");  
    } catch (ArrayIndexOutOfBoundsException e) {  
        System.out.println("ArrayIndexOutOfBoundsException: You tried to access an invalid  
array index.");  
    } catch (NumberFormatException e) {  
        System.out.println("NumberFormatException: Please enter valid integer values.");  
    } finally {  
        scanner.close();  
    }  
}  
}
```

Output:

Enter Num1:

10

Enter Num2:

0

ArrayIndexOutOfBoundsException: You tried to access an invalid array index.

ArithmeticException: Division by zero is not allowed.