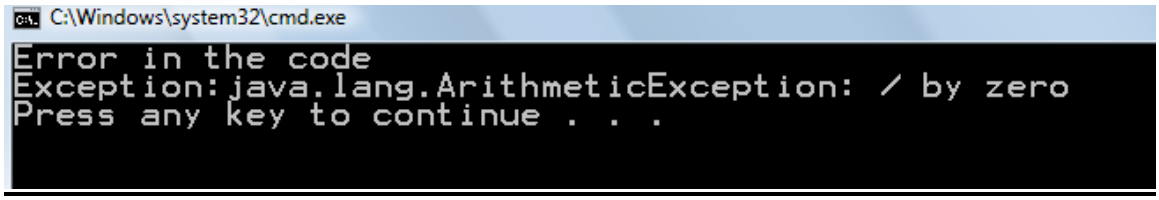
Code Example of Exception Handling

GenericException.java

```
class GenericException
{
    public static void main (String args[])
    {

       try
           {
            int num = 34, den = 0;

            int quot = num / den;
           }
        catch (Exception e)
        {
            System.out.println ("Error in the code");
            System.out.println ("Exception:" + e);
        }

    }
}
```

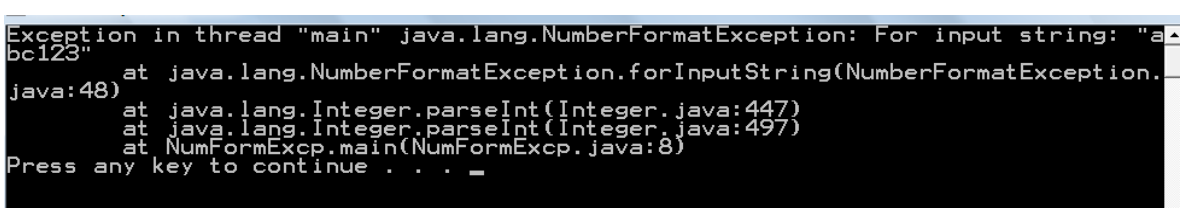
Output:



NumFormExcp.java (Without Exception Handling)

```
class NumFormExcp
{
    public static void main(String args[ ])
    {
        String str1 = new String("abc123");

        int num1 = Integer.parseInt(str1); //converts string to number

        System.out.println (num1);
    }
}
```

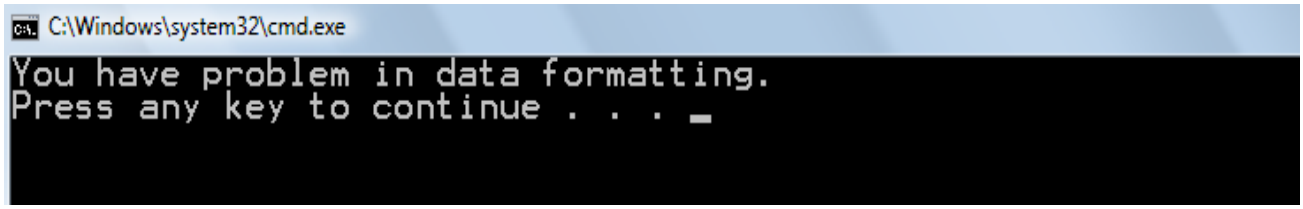
Output:



NumFormExcp.java (With Exception Handling)

```
class NumFormExcp
{
    public static void main(String args[ ])
    {
        String str1 = new String("abc123");
    try{
        int num1 = Integer.parseInt(str1); //converts string to number
        System.out.println (num1);
        }
    catch(NumberFormatException NFE){
            System.out.println ("You have problem in data formatting.");
            }
    }
}
```

Output:



excep.java (ArryIndexOutOfBound Exception)

```
class excep
{
    public static void main(String args[])
    {
        try {
            int array[] = new int[100];
            array[100] = 100;
        } catch (ArrayIndexOutOfBoundsException e) {
            System.out.println("exception: " + e);
          }
    }
}
```

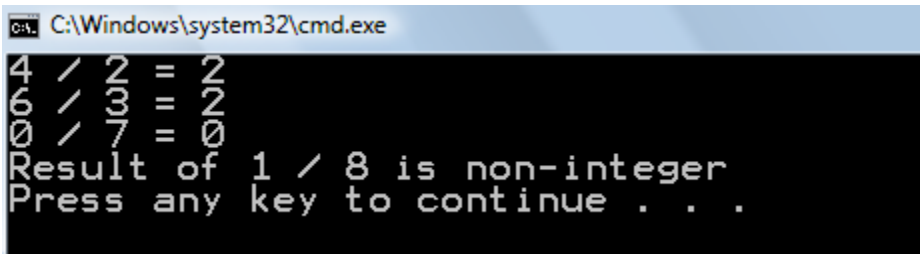
Output:

Define Custom Exception

ExceptionExample.java

```
import java.io.*;
import java.util.*;

class NonIntResException extends Exception
{
    private int n;
    private int d;

    public NonIntResException (int num, int den)
    {  n = num;    d = den;}

    public String toString()
    {return "Result of " + n + " / " + d + " is non-integer";}
}

public class ExceptionExample
{

    public static void main(String [] args)
    {
        int numer[] = {4, 6, 0, 1};
        int denom[] = {2, 3, 7, 8};

        for (int i = 0; i < 4; i++)
        {
            try
            {
                if ( (numer[i]%denom[i]) != 0) throw new NonIntResException (numer[i], denom[i]);
                    System.out.println( numer[i] + " / " + denom[i] + " = " + numer[i]/denom[i]);
            }

            catch (NonIntResException ex)
            {
                System.out.println(ex);
            }
        }
    }
```

Output:



Customexception.java

```
class NewException extends Exception
{
    int value;

    NewException(int v)
    {
        value = v;
    }

    public String toString()
    {
        return "NewException " + value;
    }
}

class customexception
{
    public static void main(String args[])
    {
        try {
            doWork(3);
            doWork(2);
            doWork(1);
            doWork(0);
        }
        catch (NewException e) {
            System.out.println("Exception: " + e);
        }
    }

    static void doWork(int value) throws NewException
    {
        if(value == 0){ throw new NewException(value);}
        else {System.out.println("No problem."); }
    }
}
```

Output: