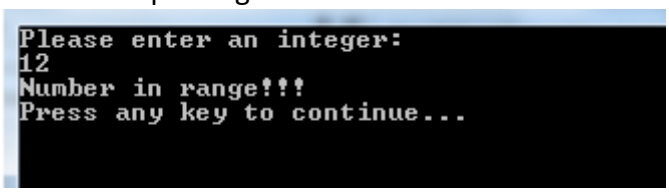
Programming Lab Exercise 15

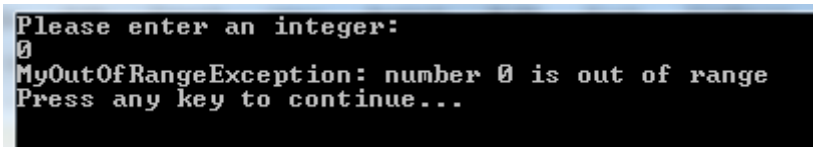
Before you start:
Create a folder called **lab15** inside your personal **java** folder you created at the start. Save all your work for lab15 in this folder.

Purpose:
Tests your understanding of the concept of Exception Handling.

Q1.

- Write a program called **`VerifyRangeTest`** which will read in an integer from the keyboard and then check that it is within a certain range e.g. 1-100. If it is not then it should display an appropriate message to the user.
- You should create a user exception class called `MyOutOfRangeException`.
- You should create a class called `Verifier` which contains:
  - one attribute of type `MyOutOfRangeException`
  - one method called `verifyIntRange()` which takes three integer parameters: `value, low, high`.
  - If `value` is not between `low` and `high` then the method should throw the `MyOutOfRangeException`.
- The main method in the driver program should create an instance of `Verifier` and invoke the `verifyIntRange()` method with appropriate parameters.
- The driver program should handle any exceptions returning from the `Verifier`
- The output might look like this:





Q2.

- Extend **`VerifyRangeTest`** so that it reads in a password into a string called `password`.

- Create a new method in the `Verifier` called `verifyPasswordStrength()`. If the `password` length is less than 8 then the method should throw a new exception called `MyInvalidPasswordException`.
- Call this method from the driver program like before.
- Output might look like this: