Rochester Institute of Technology
National Technical Institute for the Deaf
Information and Computing Studies Department

Name: Edward Riley

NACA.161 Programming Fundamentals II
In-class Exercise #21 – Introduction to Exceptions

To start catching and using Exceptions.

ExceptionTest Class

1) Create a class named **ExceptionFun** with a main method.

2) Ask the user to enter an integer number and get the number from the user.

   What Scanner method did you call?

   sc

3) Compile the program

4) Run the program, BUT enter a double number when prompted for an integer.

   What kind of error did you get?

   runtime

   What specific exception did you get?

   InputMismatch

5) The first step in handling an exception is to put the code that might throw an exception inside a **try** clause. Add a **try** block around the MyInput line.

6) Compile your program.

   Why didn't it compile?

   I need to insert catch or finally

7) Try-statements require at least one catch clause in order to compile. In order to include a catch-clause you need to specify the exception you want to catch.

What information do you need to put inside the parentheses?

Exception e

8) Add the catch clause and put the generic **Exception** class inside the parentheses.

Which exceptions will this catch?

Everything

9) Compile your code until it works.

What name did you choose for the Exception object?

e

10) Run the program and enter a floating-point number.

Did you see an error message? No (hint: it should be no)

Why not?

Because I "caught" it.

11) In order to see what went wrong you need to add a print statement inside the catch-clause.

Display the following message whenever an exception occurs

Sorry, but you need to enter a whole number.

12) Compile and run the program with a floating-point number.

If the message didn't appear, fix your code until it does.

13) Sometimes code can generate several different types of exceptions. It is always best to provide specific errors for each type of exception that occurs.

What do you have to do to catch different exceptions?

List exceptions beforehand

In order to include multiple catch-clauses, you need to know the specific exception that can happen.

What was the exception that you got when you started this exercise?

Input MisMatch

14) Add another catch-clause that catches the exception you wrote down. Put this after the catch-clause you already have.

15) Compile the code.

Why didn't it compile?

Because generic exception comes last

16) Switch your catch-clauses and compile your code until it works.

17) Java also supplies error messages you can use.

Comment out your print statement inside your **InputMismatchException** clause.

Call object's **getMessage** method, and display the result.

How did you do this?

e.getMessage();

18) Compile and run the code.

What error message did you get?

Null

19) Comment out the getMessage() code, and replace it with the **toString** method. Compile and run the program

What message did you get? ~~Null~~ java.util.InputMismatchExce

When you complete all of the steps successfully and answer all of the questions, contact your instructor to check if your application(s) executes correctly and to review your code. We will initial the line below.

_____Successful execution of code

If you do not finish the program during the class period, contact your instructor to check to review your code and initial below.

_____Code not completed during lab time

You may then submit your work at the start of next class. You may not use the work period of the next class to complete this assignment. If you do not have a signature, then you cannot receive any points for this assignment.