## Instructions for Practical Exercise

1. Use the java_misc folder of previous part. This folder will contains code files for each PE that you will do.
2. Name code files corresponding to PE numbers. For example, Pe1.java is the code file for Practical Exercise 1 (PE 1)
3. Push your project to git

## Practical Exercise: Part 4

**PE 1** Create a class with a non-default constructor (one with arguments) and no default constructor (no "no-arg" constructor). Create a second class that has a method that returns a reference to an object of the first `class.Create` the object that you return by making an anonymous inner class that inherits from the first class.

**PE 2** Write a class named Outer that contains an inner class named Inner. Add a method to Outer that returns an object of type Inner. In `main( )`, create and initialize a reference to an Inner.

**PE 3** Create a class with a main( ) that throws an object of class Exception inside a try block.

a. Give the constructor for Exception a String argument.

b. Catch the exception inside a catch clause and print the String argument.

c. Add a finally clause and print a message to prove you were there.

**PE 4** Write a program that will generate exceptions of type NegativeArraySizeException, IndexOutOfBoundsException, NullPointerException. Record the catching of each exception by displaying the message stored in the exception object.

**PE 5** Write a program with the implementation of Regular Expression to find the presence of the name Harry in a string.

Input: This is Harry.

Output: Is Harry here ? true

Input : This is Henry.

Output: Is Harry here ? false

**PE 6** Write a program to find out the multiple occurrences of the given word in a string using Matcher methods.

Input : She sells seashells by the seashore

Given word: se

Output :

Found at: 4 - 6

Found at: 10 - 12

Found at: 27 - 29