<u>**Due**</u>: August 28, Tuesday, **5:00 pm** (zero credit if late turn-in)

Write two Java programs as follows:
- Use "default" package: i.e., Your program should not have "package ...." on the top of the program.
- Define a public class named **MyNumbers** as follows: (Note: Java is a case-sensitive language)
    - instance variable: **number** of int type
    - command: set value in **number**
    - query1: get value from number
    - query2: get a sequence of integers – 1 through **number** (e.g., 1 2 3 4 if number = 4)
- Define a public class named **Quiz01** as follows for the purpose of testing **MyNumbers**:
    - Read an integer between 1 and 10, inclusive. (Use **Scanner** to read numbers from keyboard)
        - If the number entered is outside the range, re-prompt to enter.
        - You may assume that an integer is always entered.
    - Display a pattern based on the number entered
        - You must create an object of **MyNumbers** and use commands and queries to display the pattern.

The pattern to be displayed: Suppose n is entered.
```
1
1 2
1 2 3
...
1 2 3 ... n
...
1 2 3
1 2
1
```

For example, if 6 is entered, the program should display:
```
1
1 2
1 2 3
1 2 3 4
1 2 3 4 5
1 2 3 4 5 6
1 2 3 4 5
1 2 3 4
1 2 3
1 2
1
```

Tips: From C++ to Java:
- Inside the `main` method or any other method, you can use C++ programming language constructs of selection (if, switch) and loop (while, for, do-while) as if they are Java. There is little difference between C++ and Java in those constructs.
- Use System.out.println( ) or System.out.print( ) method to print something on the screen. This is Java counter-part of cout in C++
- Use String (Java) instead of string (C++). + operator works for string concatenation similar to C++.

Turn-in: Submit **Quiz01.java** and **MyNumbers.java** (source files only) via D2L (Dropbox -> Quiz01 link). Submit two files individually – do not zip or compress them.

Grading Policy:
- Follow each instruction above very carefully and precisely. Each violation is subject to deduction. These are some of possible violations, but is not limited to:
  - class and file names (including case sensitivity)
  - use of 'package'
  - use of commands and queries
  - input validation (1 ~ 10)
  - submission: uncompressed two individual source files only