Software Testing, Lab 4, April 18. 2019. Room:47-Room 7

**Tasks:**

1. Install MuJava. The instruction of how to install and use Mujava can be seen in <https://cs.gmu.edu/~offutt/mujava/> .
2. Two small programs are given for your task. BubbleSort.java is an implementation of bubble sort algorithm and BackPack.java is a solution of 01 backpack problem. Try to generate Mutants of 2 given programs with MuJava.
3. Write testing sets for 2 programs with Junit, and run mutants on the test sets with MuJava.

**Requirements for the experiment:**

1. Finish the tasks above individually.
2. Check in your java code to github and send the URL to [tjuscsst@qq.com](mailto:tjuscsst@qq.com)
3. Post your experiment report to your blog and send the URL to [tjuscsst@qq.com](mailto:tjuscsst@qq.com) , the following information should be included in your report:
   1. The brief description that you install MuJava
   2. Steps for generating Mutants
   3. Steps for making test sets and running mutants.
   4. Your mutants result (The number of live mutants, killed mutants, etc.)

**Submission deadline:**

23:59 April 25, 2019.