**Individual assignment 2:**

**Individual software process**

**Deadline：**

2019-3-10 24:00，Based on your submission time on Baidu cloud disk.

File name：

Individual reports2-Student ID

**Evaluation standards**

|  |  |
| --- | --- |
| On time **Submission1** of this word report | +5’ |
| On time **Submission2** of your code to your Github account | +5’ |
| the quality of the submission1 (Prepare and check just so so) | +2’ |
| The quality of the submission (Prepare and check carefully) | +5’ |
| **Full mark of Assignment 1+2 （on time）** | **20’** |
| **Full mark of Assignment 1+2 （delay 1 week）** | **0’** |
| **Full mark of Assignment 1+2 （delay over 1 week! OR Plagiarize! OR do not submit!）** | **-20’** |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Photo | Name | Student ID | Nationality | Sex | Email |
|  |  |  |  |  |  |

**The aim of this assignment**

(1) Github operation.

(2) To master the software project personal development process.

(3) To master the method of operating the software project on the Github.

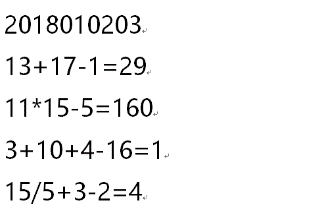
**Task1:**

Using the JAVA programming language or any other language that you can handle.

**A command-line software development** consisting of three to five digits of four operations exercises is independently completed.

The basic functional requirements of the software are as follows:

1. The program can receive an input parameter n, and then randomly generate n-channel addition (+), subtraction (-), multiplication (\*) and division (/) exercises. Each number is between 0 and 100, and the operator is between 3 and 5.
2. After the exercise has been generated, output your Student ID and the generated n-channel exercises and their correct answers to the file "result.txt", do not output additional information, the file directory is consistent with the program directory.



**Task 2:**

The source code of task 1 is submitted to the project repository under your registration of the Github account.

Your project should be consistent with the directory and main file name of the demo sample.

Demo sample: https://github.com/Sherlock1895lllll/Calc\_Demo

**Please copy yours link here!**

**Task 3:**

**Writing words about how you do finish the implementation of the personal project.**

Please complete the following 7 sections:

1. **Requirement analysis:** Even if the teacher has given the subject, it is also necessary to make an analysis of the requirements of the subject.
2. **Functional design:** the function will have: the basic function expansion function.
3. **Implementation:** The design includes which classes you will have, what functions are these classes, and what is the relationship between them? What important functions do you design, and whether the key function needs to draw a flow chart? What is the logical relationship between functions?
4. **Testing:** Your program must be operational. Please show the running shot of the program, including the screen shot corresponding to the feature requirements. The screenshots show that your program does complete the project's needs, and if the program has the extended needs, please show it in a generous way.
5. **Core code:** Paste a code snippet that you feel is unique or satisfying.

Tip: To have the necessary annotation description, prompt: Do not paste all the codes! Non-specified (to-be-deducted)

1. **Summary:** What’s your feeling of this experience?
2. **Finishing the following Personal Software Process （PSP）**, which is important to let yourself see your estimate and actual consumption time, which link is the most time-consuming, which link estimate and practice differ greatly? Why?

|  |  |  |
| --- | --- | --- |
| PSP2.1  (Personal Software Process) | Estimated the time required to complete and why  (min) | Actual completion time and why  (min) |
| **Planning** |  |  |
| ·       Estimate（To Estimate how much time this task will take and plan the general steps） |  |  |
| **Development** |  |  |
| ··       Analysis（Demand Analysis (including learning new technology)） |  |  |
| ·       Design Spec  （Generate design document） |  |  |
| ·       Design Review（Design review (and co-worker review and design document)  ） |  |  |
| ·       Coding Standard  (Code specification (develop appropriate specifications for current development)) |  |  |
| ·       Design  (detailed design) |  |  |
| ·       Coding |  |  |
| ·       Code Review |  |  |
| ·       Test  (Testing (self-testing, modifying code, submitting changes)) |  |  |
| **Reporting** |  |  |
| ··       Test Report |  |  |
| ·       Size Measurement |  |  |
| ·       Postmortem & Process Improvement Plan |  |  |