Homework1

A simple practice on
xUnit testing framework
and TDD

Motivation

- Learn the first step to write testing code
  - coding by using XUnit (googe testing framework)
- Practice boundary value, equivalence class, , edge testing, and decision table based
- Practice TDD (test-driven development) by google test
- Practice Xunit in a practical project

Requirement (stage1)

- Implement the Triangle, NextDate, and Commission problems by TDD
  - using XUnit for writing testing code
  - In this time, we use google testing framework
- Analyze boundary value, equivalence class, edge values, and decision table based
  - writing test code using these analyses
- Organize your testing code in four forms: week/strong and robust/normal

Steps

- Installing your own google testing framework and related libraries
- Writing test code first
  - The testing can be executed before finishing the feature code
  - After test failed, revise the code and test again
  - Repeat until all tests pass

development

- Writing your development document in
  - draft work in hackpad, hackmd, trello, or dropbox paper
  - formal report in google doc
- Put your code in github.com
  - You should commit your code for each stages of development (test fail, writing new feature code, test pass, fix bug, regression)

Homework Stage 1 Due

- 3/21
- Please develop your homework progressively
  - each week must be with some testing, and development
    - draft in hackpad, hackmd, or dropbox paper
    - formal in google doc
    - testing code in github
  - Grading according to weekly progress
    - failed and pass cases must be recorded

The TDD Process

- Identify test cases (week/strong, normal/robust)
- run test code
- write feature code
- run progression test (strong form)
  - pass
  - fail
    - bug fix and run regression test (weak form)
- Repeat the above process