CS163 – Data Structures & Algorithms

Lab 01
Review

Department of Software Engineering-FIT-VNU-HCMUS

1

Notes

Create a single solution/folder to store your source code in a week.

Then, create a project/sub-folder to store your source code of each assignment.

The source code in an assignment should have at least 3 files:

- A header file (.h): struct definition, function prototypes/definition.
- A source file (.cpp): function implementation.
- Another source file (.cpp): named YourID_Ex01.cpp, main function. Replace 01 by id of an assignment.

Make sure your source code was built correctly. Use many test cases to check your code before submitting to Moodle.

Name of your submission: **StudentID_XXX_YY.zip**. XXX: week. XX: number of complete assignments. For example: 18127100_W01_02.zip

2

Content

3

Assignments

A: YY: 01

H: YY: 06

3.1. Assignment 1

https://leetcode.com/problems/binary-search/

3.2. Assignment 2

https://leetcode.com/problems/search-insert-position/

3.3. Assignment 3

https://codeforces.com/problemset/problem/750/A

3.4. Assignment 4

https://codeforces.com/problemset/problem/1138/A

It is more or less obvious that the answer is the maximum among the minimums of the length of two consecutive segments of equal elements. As for implementation, just go from left to right and keep the last element, the length of the current segment and the length of the next segment. When the current element is not the same as the last element, update the answer.

3.5. Assignment 5

https://codeforces.com/problemset/problem/1366/A

3.6. Assignment 6

https://codeforces.com/problemset/problem/1463/A