Practice #9

Trees (Heap)

Yunmin Go

School of CSEE

HANDONG GLOBAL UNIVERSITY

Practice #9 TO-DO List

To-Do	Submission	Notes
Max Heap	Screenshot and source code (MaxHeap.h, MaxHeap.cpp)	p.55 ~ 60, Chapter 5
Min Heap	Screenshot and source code (MinHeap.h, MinHeap.cpp)	p.55 ~ 60, Chapter 5

- Upload your screenshot and source codes on LMS by 11pm on 4/28 (Wed).
  - All your screenshots should be merged in one pdf file, screenshot.pdf.
  - Your pdf and all source codes should be compressed into zip file.
- File name: practice09_Your Student ID_Name.zip (only zip, not pdf, docx, c, etc)
  - ex) practice09_20400022_고윤민.zip

Max Heap

- Implement a max heap class
  - Write MaxHeap.h and MaxHeap.cpp (MaxHeapMain.cpp: no need to change)
  - Refer to p.55 ~ 60, Chapter 5
  - You have to implement swap() and Print() since slides do not provide the source codes

Max Heap

- Expected results

```
PS C:\ds\practice09\sol> .\MaxHeapMain.exe
Max Heap Insert

Max Heap Print:
[7 Why][4 Not][5 Change][1 The][2 World][3 ?]

Max Heap Delete:
[7 Why][5 Change][4 Not]

Max Heap Print:
[3 ?][2 World][1 The]
```

HANDONG GLOBAL UNIVERSITY

Min Heap

- Implement a min heap class
  - Write MinHeap.h and MinHeap.cpp (MinHeapMain.cpp: no need to change)
  - Just modify few things from max heap class.

Min Heap

- Expected results

```
PS C:\ds\practice09\sol> .\MinHeapMain.exe
Min Heap Insert

Min Heap Print:
[2 AAA][14 BBB][10 CCC][15 DDD][20 EEE][25 FFF][12 GGG][30 HHH]

Delete:
[2 AAA][10 CCC][12 GGG]

Min Heap Print:
[14 BBB][15 DDD][25 FFF][30 HHH][20 EEE]
```