

Practice #15

Standard Template Library (STL)

Yunmin Go

School of CSEE



Practice #15 TO-DO List

To-Do	Submission	Notes
STL (vector, list, stack, queue, set difference, map)	Screenshot and source code (stl.cpp)	p.24~27, C++ Part2
String with Sort	Screenshot and source code (person.cpp)	p.59~60, C++ Part2

- Upload your screenshot and source codes on LMS by 11pm on 6/9 (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: practice15_Your Student ID_Name.zip (only zip, not pdf, docx, c, etc)
 - ex) practice15_20400022_고윤민.zip

STL

- Implement example sources codes
 - Refer to stl.cpp
 - Write example source codes in C++ part 2
 - vector(p.28), list(p.32~34), stack(p.39), queue(p.43), set difference(p.50), map(p.56)
 - Implement the following functions
 - p.28: main() → vector_ex()
 - p.32: print_list() → print_list() (no change)
 - p.33~34: main() → list_ex()
 - p.39: main() → stack_ex()
 - p.43: main() → queue_ex()
 - p.50: main() → setdiff()
 - p.56: main() → map_ex()

STL

■ Expected results

```
PS C:\ds\practice15\sol> .\stl.exe
* Example of vector
myvector contains: E F G C C D D B A A A

* Example of list
Enter a line with six words:
Handong Global University Data Structures Fun!
Front element: Handong
Back element: Fun!
Size of list: 6
List contents from beginning to end:
Handong Global University Data Structures Fun!
Enter a word to insert after the first: Spring
Next to last word has been erased.
Enter a word to add at the front: Summer
List contents from beginning to end:
Summer Handong Spring Global University Data Fun!
List contents from beginning to end:
AA BB CC Summer Handong Spring Global University Data Fun!

* Example of stack
Handong Global University Data Structures Fun!
Top: Fun!
Size 6
Fun!
Structures
Data
University
Global
Handong
```

```
* Example of queue
Handong Global University Data Structures Fun!
Front: Handong
Back: Fun!
Handong
Global
University
Data
Structures
Fun!

* Example of set difference
The difference has 3 elements:
5 15 25

* Example of map
abc 1
bbc 2
cnn 3
Exist
```

String with Sort

- Implement example sources code in p.59~60.
 - Refer to person.cpp
- Expected results

```
PS C:\ds\practice15\sol> ./person.exe
13, JunEun
15, Strange Yun
22, MinJi
26, Minho
28, Kangho
```