

Stacks

In this practice problem, you must write a program that:

- 1) Creates a stack of integers (using the stack provided by the C++ Standard Library).
- 2) Fills it with 10 values entered by the user.
- 3) Displays the content of the stack.
- 4) Removes from the stack a number specified by the user (if it exists, of course).
- 5) Displays the new content of the stack.

Before writing the code, draw diagrams of the stack describing what your code will have to do in each step.

Use auxiliary stacks if necessary.

Sample run of my solution

```
> sh -c make -s
> ./main
Please enter 10 numbers

Enter #:1: 1
Enter #:2: 2
Enter #:3: 3
Enter #:4: 4
Enter #:5: 5
Enter #:6: 6
Enter #:7: 7
Enter #:8: 8
Enter #:9: 9
Enter #:10: 10
Thanks!

Content of stack from top to bottom

0:10
1:9
2:8
3:7
4:6
5:5
6:4
7:3
8:2
9:1

Enter the value to remove from the stack: 13

Content of stack from top to bottom

0:10
1:9
2:8
3:7
4:6
5:5
6:4
7:3
8:2
9:1

Do you want to continue?: y
Enter the value to remove from the stack: 7

Content of stack from top to bottom

0:10
1:9
2:8
3:6
4:5
5:4
6:3
7:2
8:1

Do you want to continue?: n
> █
```