Challenge 5: Sort Values in a Stack

In this lesson, we will learn how to sort elements using a stack.

We'll cover the following

Problem Statement#

Implement a function called `sort_stack()` which takes a stack and sorts all of its elements in *ascending* order such that when they are popped and printed, they come out in ascending order. So the element that was pushed last to the stack has to be the smallest.

Input#

A stack of integers.

Output#

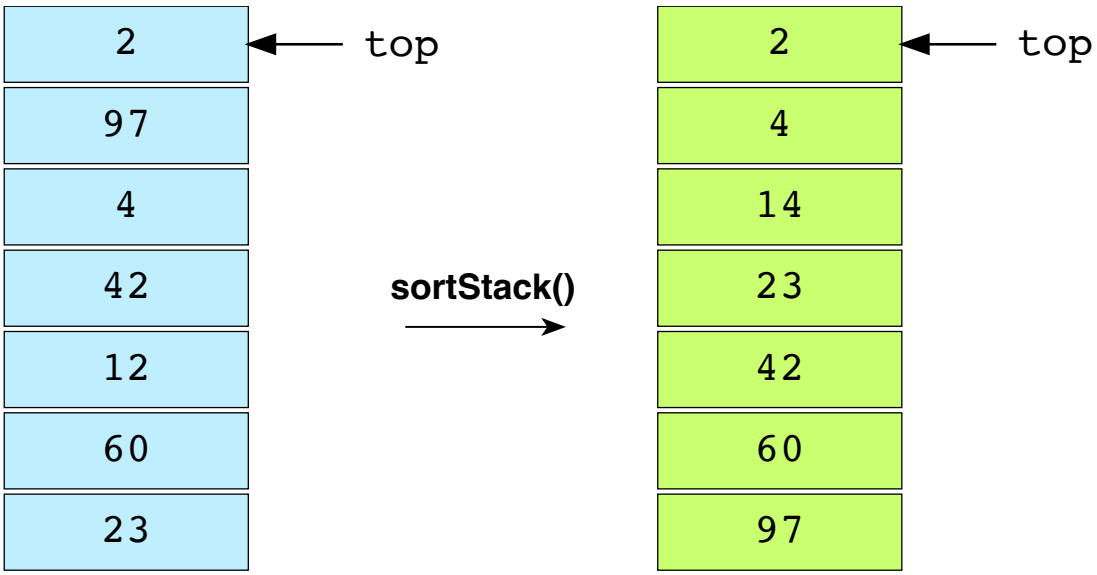
The stack with all its elements sorted in descending order.

Sample Input#

```
stack = [23, 60, 12, 42, 4, 97, 2]
```

Sample Output#

```
result = [97, 60, 42, 23, 12, 4, 2]
## 2 was the value last pushed
```



Coding Exercise

Take a close look at the problem and design a step-by-step algorithm before jumping on to the implementation.

This problem is designed for your practice, so try to solve it on your own first. If you get stuck, you can always refer to the solution review for this challenge.

Good luck!

main.py

Stack.py

```
from Stack import MyStack

def sort_stack(stack):
    # Write your code here
    temp_list = []
    while not stack.is_empty():
        temp_list.append(stack.pop())
    temp_list.sort(reverse=True)
    print(temp_list)
    for val in temp_list:
        stack.push(val)
    return stack
```


Back

Solution Review: Implement a Queue ...

Next

Solution Review: Sort Values in Stack

Completed

Report an Issue