CS2023 - DATA STRUCTURES AND ALGORITHMS

IN-CLASS LAB EXERCISE

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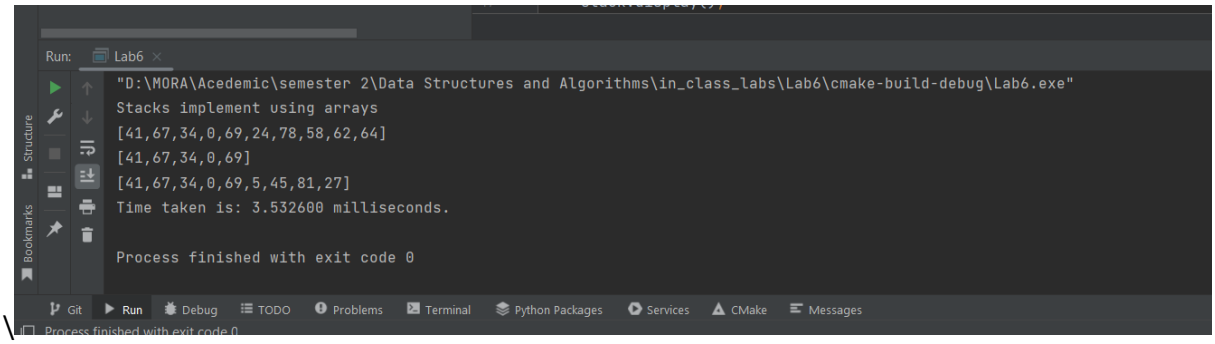
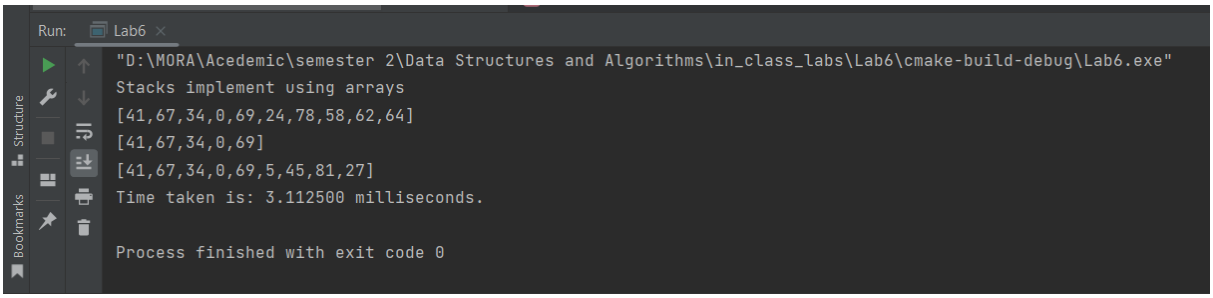
Stack implement using array

Git hub link:https://github.com/NRM10101/InclassAssingments-DSA/blob/main/main.cpp

some tests for random number(<100) inputs(push and pop and display operation)

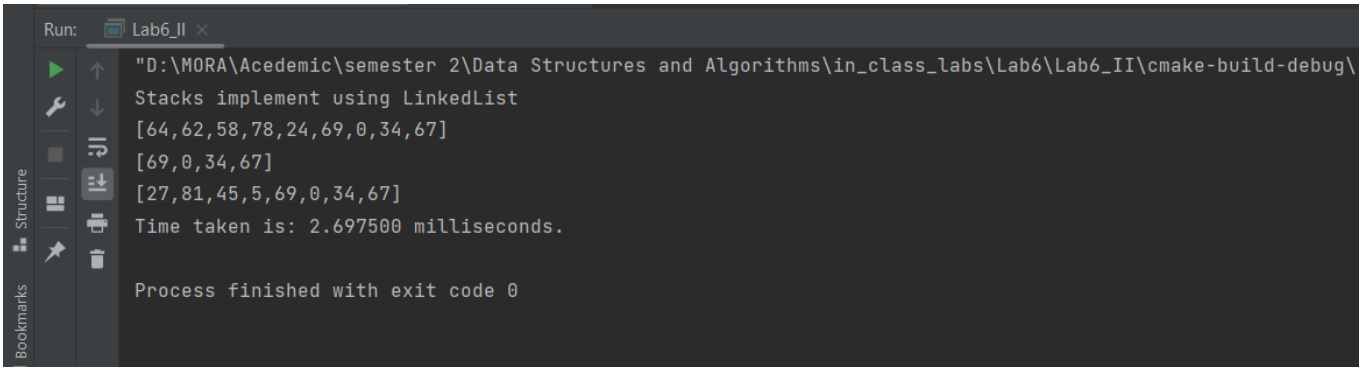


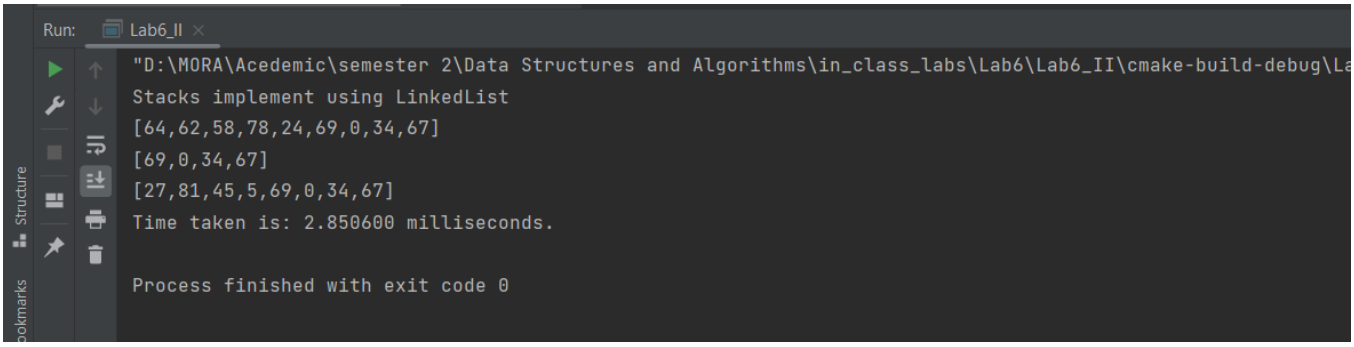


Stack implement using LinkedList

Git hub link:https://github.com/NRM10101/Data-Structures-and-Algorithms/blob/main/main.cpp

some tests for random number(<100) inputs(push , pop and display operation)





Discussion:

When we consider stack implementation by linked list of above code, we prefer the beginning of the linked list as the top of the stack.

PUSH:

- Time complexity of adding a node at the beginning :O(1)

POP:

- Time complexity of removing the first node: O(1)