

(Exercise 1a) 1 2 3 4 5 0 0 0 0 0

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D:\pan\Study\University\Computer Science\CSCI2510 Computer Organisations\Project\A2_stack\A2_stack\Debug\A2_stack.exe
Enter NUMBER or FUNCTION:
(any positive number: the number to be pushed onto the top of stack;
0: pop the number from the top of the stack;
-1: print out the number on the top of the stack without popping it;
-2: print out the size of numbers that have been pushed into the stack;
-3: print out the contents of the stack.)
1 2 3 4 5 0 0 0 0
Enter NUMBER or FUNCTION:
(any positive number: the number to be pushed onto the top of stack;
0: pop the number from the top of the stack;
-1: print out the number on the top of the stack without popping it;
-2: print out the size of numbers that have been pushed into the stack;
-3: print out the contents of the stack.)
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0: pop the number from the top of the stack;
-1: print out the number on the top of the stack without popping it;
-2: print out the size of numbers that have been pushed into the stack;
-3: print out the contents of the stack.)
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(any positive number: the number to be pushed onto the top of stack;
0: pop the number from the top of the stack;
-1: print out the number on the top of the stack without popping it;
-2: print out the size of numbers that have been pushed into the stack;
-3: print out the contents of the stack.)
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(any positive number: the number to be pushed onto the top of stack;
0: pop the number from the top of the stack;
-1: print out the number on the top of the stack without popping it;
-2: print out the size of numbers that have been pushed into the stack;
-3: print out the contents of the stack.)
Pop 5
Enter NUMBER or FUNCTION:
(any positive number: the number to be pushed onto the top of stack;
0: pop the number from the top of the stack;
-1: print out the number on the top of the stack without popping it;
-2: print out the size of numbers that have been pushed into the stack;
-3: print out the contents of the stack.)
Pop 4
Enter NUMBER or FUNCTION:
(any positive number: the number to be pushed onto the top of stack;
0: pop the number from the top of the stack;
-1: print out the number on the top of the stack without popping it;
-2: print out the size of numbers that have been pushed into the stack;
-3: print out the contents of the stack.)
-3: print out the contents of the stack.)
Pop 3
Enter NUMBER or FUNCTION:
(any positive number: the number to be pushed onto the top of stack;
0: pop the number from the top of the stack;
-1: print out the number on the top of the stack without popping it;
-2: print out the size of numbers that have been pushed into the stack;
-3: print out the contents of the stack.)
Pop 2
Enter NUMBER or FUNCTION:
(any positive number: the number to be pushed onto the top of stack;
0: pop the number from the top of the stack;
-1: print out the number on the top of the stack without popping it;
-2: print out the size of numbers that have been pushed into the stack;
-3: print out the contents of the stack.)
Pop 1
Enter NUMBER or FUNCTION:
(any positive number: the number to be pushed onto the top of stack;
0: pop the number from the top of the stack;
-1: print out the number on the top of the stack without popping it;
-2: print out the size of numbers that have been pushed into the stack;
-3: print out the contents of the stack.)
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(Exercise 1b) 1 0 1 2 0 0 3 4 0 0

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D:\pan\Study\University\Computer Science\CS212510 Computer Organisations\Project\A2 stack\A2 stack\Debug\A2 stack.exe
Enter NUMBER or FUNCTION:
(any positive number: the number to be pushed onto the top of stack;
0: pop the number from the top of the stack;
-1: print out the number on the top of the stack without popping it;
-2: print out the size of numbers that have been pushed into the stack;
-3: print out the contents of the stack.)
1 0 1 2 0 0 3 4 0 0
Enter NUMBER or FUNCTION:
(any positive number: the number to be pushed onto the top of stack;
0: pop the number from the top of the stack;
-1: print out the number on the top of the stack without popping it;
-2: print out the size of numbers that have been pushed into the stack;
-3: print out the contents of the stack.)
Pop
Enter NUMBER or FUNCTION:
(any positive number: the number to be pushed onto the top of stack;
0: pop the number from the top of the stack;
-1: print out the number on the top of the stack without popping it;
-2: print out the size of numbers that have been pushed into the stack;
-3: print out the contents of the stack.)
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(any positive number: the number to be pushed onto the top of stack;
0: pop the number from the top of the stack;
-1: print out the number on the top of the stack without popping it;
-2: print out the size of numbers that have been pushed into the stack;
-3: print out the contents of the stack.)
Enter NUMBER or FUNCTION:
(any positive number: the number to be pushed onto the top of stack;
0: pop the number from the top of the stack;
-1: print out the number on the top of the stack without popping it;
-2: print out the size of numbers that have been pushed into the stack;
-3: print out the contents of the stack.)
Pop 2
Enter NUMBER or FUNCTION:
(any positive number: the number to be pushed onto the top of stack;
0: pop the number from the top of the stack;
-1: print out the number on the top of the stack without popping it;
-2: print out the size of numbers that have been pushed into the stack;
-3: print out the contents of the stack.)
Pop 1
Enter NUMBER or FUNCTION:
(any positive number: the number to be pushed onto the top of stack;
0: pop the number from the top of the stack;
-1: print out the number on the top of the stack without popping it;
-2: print out the size of numbers that have been pushed into the stack;
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0: pop the number from the top of the stack;
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-2: print out the size of numbers that have been pushed into the stack;
-3: print out the contents of the stack.)
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-3: print out the contents of the stack.)
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(any positive number: the number to be pushed onto the top of stack;
0: pop the number from the top of the stack;
-1: print out the number on the top of the stack without popping it;
-2: print out the size of numbers that have been pushed into the stack;
-3: print out the contents of the stack.)
Pop 4
Enter NUMBER or FUNCTION:
(any positive number: the number to be pushed onto the top of stack;
0: pop the number from the top of the stack;
-1: print out the number on the top of the stack without popping it;
-2: print out the size of numbers that have been pushed into the stack;
-3: print out the contents of the stack.)
Pop 3
Enter NUMBER or FUNCTION:
(any positive number: the number to be pushed onto the top of stack;
0: pop the number from the top of the stack;
-1: print out the number on the top of the stack without popping it;
-2: print out the size of numbers that have been pushed into the stack;
-3: print out the contents of the stack.)
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Exercise 2:

(Exercise 2a) 1 2 3 0 0 0 0

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Microsoft Visual Studio 雲端主控台
Enter NUMBER or FUNCTION:
(any positive number: the number to be pushed onto the top of stack;
0: pop the number from the top of the stack;
-1: print out the number on the top of the stack without popping it;
-2: print out the size of numbers that have been pushed into the stack;
-3: print out the contents of the stack.)
1 2 3 0 0 0
Enter NUMBER or FUNCTION:
(any positive number: the number to be pushed onto the top of stack;
0: pop the number from the top of the stack;
-1: print out the number on the top of the stack without popping it;
-2: print out the size of numbers that have been pushed into the stack;
-3: print out the contents of the stack.)
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(any positive number: the number to be pushed onto the top of stack;
0: pop the number from the top of the stack;
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-2: print out the size of numbers that have been pushed into the stack;
-3: print out the contents of the stack.)
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0: pop the number from the top of the stack;
-1: print out the number on the top of the stack without popping it;
-2: print out the size of numbers that have been pushed into the stack;
-3: print out the contents of the stack.)
Pop 3
Enter NUMBER or FUNCTION:
(any positive number: the number to be pushed onto the top of stack;
0: pop the number from the top of the stack;
-1: print out the number on the top of the stack without popping it;
-2: print out the size of numbers that have been pushed into the stack;
-3: print out the contents of the stack.)
Pop 2
Enter NUMBER or FUNCTION:
(any positive number: the number to be pushed onto the top of stack;
0: pop the number from the top of the stack;
-1: print out the number on the top of the stack without popping it;
-2: print out the size of numbers that have been pushed into the stack;
-3: print out the contents of the stack.)
Pop 1
Enter NUMBER or FUNCTION:
(any positive number: the number to be pushed onto the top of stack;
0: pop the number from the top of the stack;
-1: print out the number on the top of the stack without popping it;
-2: print out the size of numbers that have been pushed into the stack;
-3: print out the contents of the stack.)
ERROR THE STACK IS EMPTY
D:\an\Study\University\Computer Science\CS12510 Computer Organisations\Project\A2_stack\A2_stack\Debug\A2_stack.exe (處理序: 8420) 已結束。出現代碼 0。
按任意鍵關閉此視窗...
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(Exercise 2b) 1 2 3 4 5 6 7 8 9 10 11

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Microsoft Visual Studio 編輯主控台
Enter NUMBER or FUNCTION:
(any positive number: the number to be pushed onto the top of stack;
0: pop the number from the top of the stack;
-1: print out the number on the top of the stack without popping it;
-2: print out the size of numbers that have been pushed into the stack;
-3: print out the contents of the stack.)
1 2 3 4 5 6 7 8 9 10 11
Enter NUMBER or FUNCTION:
(any positive number: the number to be pushed onto the top of stack;
0: pop the number from the top of the stack;
-1: print out the number on the top of the stack without popping it;
-2: print out the size of numbers that have been pushed into the stack;
-3: print out the contents of the stack.)
Enter NUMBER or FUNCTION:
(any positive number: the number to be pushed onto the top of stack;
0: pop the number from the top of the stack;
-1: print out the number on the top of the stack without popping it;
-2: print out the size of numbers that have been pushed into the stack;
-3: print out the contents of the stack.)
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(any positive number: the number to be pushed onto the top of stack;
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-1: print out the number on the top of the stack without popping it;
-2: print out the size of numbers that have been pushed into the stack;
-3: print out the contents of the stack.)
Enter NUMBER or FUNCTION:
(any positive number: the number to be pushed onto the top of stack;
0: pop the number from the top of the stack;
-1: print out the number on the top of the stack without popping it;
-2: print out the size of numbers that have been pushed into the stack;
-3: print out the contents of the stack.)
Enter NUMBER or FUNCTION:
(any positive number: the number to be pushed onto the top of stack;
0: pop the number from the top of the stack;
-1: print out the number on the top of the stack without popping it;
-2: print out the size of numbers that have been pushed into the stack;
-3: print out the contents of the stack.)
Enter NUMBER or FUNCTION:
(any positive number: the number to be pushed onto the top of stack;
0: pop the number from the top of the stack;
-1: print out the number on the top of the stack without popping it;
-2: print out the size of numbers that have been pushed into the stack;
-3: print out the contents of the stack.)
Enter NUMBER or FUNCTION:
(any positive number: the number to be pushed onto the top of stack;
0: pop the number from the top of the stack;
-1: print out the number on the top of the stack without popping it;
-2: print out the size of numbers that have been pushed into the stack;
-3: print out the contents of the stack.)
ERROR THE STACK IS FULL
D:\panStudy\University\Computer Science\CSC12510 Computer Organisations\Project\A2_stack\A2_stack\Debug\A2_stack.exe (處理序 5172) 已結束。出現代碼 0。
按任意鍵關閉此視窗...
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(Exercise 3a) 1 2 3 -1 4 5 -1 0 0 0 0 0 -1 0

The image displays two overlapping windows of Microsoft Visual Studio. The top window shows the source code of a C++ program that implements a stack using an array. The code includes functions for pushing and popping elements, printing the stack's contents, and printing the size of the stack. The main function interacts with the user, allowing them to push or pop elements and print the stack's state. The bottom window shows the program's execution. It displays the output of the program, which includes the stack's contents and size after several push and pop operations. The output shows that the stack is empty after a series of pop operations, and an error message "ERROR THE STACK IS EMPTY" is displayed. The Windows taskbar at the bottom shows the date and time as 19/10/2020, 006.

[illegible]