

Activity No. <n>

Seatwork 4.1 : Stacks

Course Code: CPE010

Program: Computer Engineering

Course Title: Data Structures and Algorithms

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Section: CPE21S4

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6. Output

The screenshot shows a C++ development environment with the following details:

- Code Editor:** Untitled1.cpp. The code implements a stack using the standard library's `<stack>` container. It defines a `showstack` function to print the stack's elements and `main` function to demonstrate pushing values (10, 30, 20, 5, 1) onto the stack, popping them off, and printing the stack again after each push.
- Output Window:** A terminal window titled "C:\Users\TIPQC\Desktop\Untitled1.exe" displays the following output:

```
The stack is: 1      5      20     30
10
ns.size() : 5
s.top() ;      5      20     30     10

-----
Process exited after 0.0114 seconds with return
value 0
Press any key to continue . . . |
```
- Compiler Log:** Shows compilation results with 0 errors and 0 warnings, outputting to "C:\Users\TIPQC\Desktop\projects\Untitled1.exe".

8. Conclusion

The code shows how to use a stack in C++ STL using the simplest form which includes pushing, popping and viewing the stack. This is one of the methods to have a good mental image for how the stack works in runtime.

9. Assessment Rubric