

Activity No. <4.1>

<Seatwork 4.1: Stacks>

Course Code: CPE010

Program: Computer Engineering

Course Title: Data Structures and Algorithms

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6. Output

CODE:

```
STACKS.cpp
1 #include <iostream>
2 #include <stack>
3 using namespace std;
4
5 void showstack(stack <int> s)
6 {
7     while (!s.empty())
8     {
9         std::cout << '\t' << s.top();
10        s.pop();
11    }
12    std::cout << '\n';
13 }
14
15 int main ()
16 {
17     stack <int> s;
18     s.push(10);
19     s.push(30);
20     s.push(20);
21     s.push(5);
22     s.push(1);
23
24     std::cout << "The stack is : ";
25     showstack(s);
26
27     std::cout << "\ns.size() :" << s.size();
28     std::cout << "\ns.top() :" << s.top();
29
30     std::cout << "\ns.pop() : ";
31     s.pop();
32     showstack(s);
33
34     return 0;
35 }
```

OUTPUT:

```
C:\Users\TIPQC\Desktop\ANA X + | ^  
The stack is : 1 5 20 30 10  
  
s.size() :5  
s.top() : 1  
s.pop() : 5 20 30 10  
  
-----  
Process exited after 0.01719 seconds with return value 0  
Press any key to continue . . . |
```

7. Supplementary Activity

8. Conclusion

During this activity, I've learned how to use and implement how stacks works, its simple and quite an interesting process, since it has such a few functions but it can help a lot when arranging things or to easily move things around.

9. Assessment Rubric