

```

// This is the test file StackP-Test.cpp.
// It is contrived to test important features of class StackP
// that corresponds to a pointer-based stack implementation of a stack.
// The header file is StackP.h while implementation file is StackP.cpp.

#include <iostream>
using namespace std;

#include "StackP.h"
using namespace csci301_StackP;

int main()
{
    Stack s1;
    StackItemType num;

    // Test if s1 is empty
    if(s1.isEmpty())
        cout << "At this point, stack s1 is empty";
    else
        cout << "At this point, stack s1 is nonempty.";
    cout << endl;

    //////////////////////////////////////
    cout << endl << "Building s1 as a stack of integers:" << endl;
    cout << "Please enter integers ending with -1: ";

    cin >> num;
    while (num != -1)
    {
        s1.push(num);
        cin >> num;
    } // end of while
    cout << endl;

    // Test if s1 is empty
    if(s1.isEmpty())
        cout << "At this point, stack s1 is empty";
    else
        cout << "At this point, stack s1 is nonempty.";
    cout << endl << endl;

    // Creating a copy of s1
    cout << "Create a copy, say s2 of s1." << endl;
    Stack s2(s1);

    // Writing s2 in reverse
    cout << endl << "Here is the list of items in s2 in reverse: ";
    while(!s2.isEmpty())
    {
        s2.getTop(num);
        cout << num << " ";
        s2.pop();
    } // end of while
    cout << endl << endl;
}

```

```
// Test if s2 is empty
if(s2.isEmpty())
    cout << "At this point, stack s2 is empty.";
else
    cout << "At this point, stack s2 is not empty.";
cout << endl << endl;

return 0;
}
```