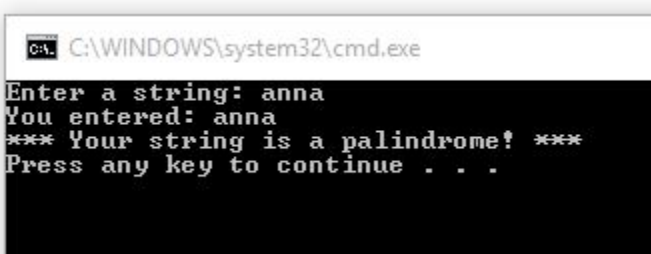


```
/*-----  
Programming Assignment 3 Submission  
Queues -- Use a Queue and Stack to test if a string is a Palindrome  
Created by Hyo Lee  
Student ID: 002292770  
01/26/2016  
-----*/
```

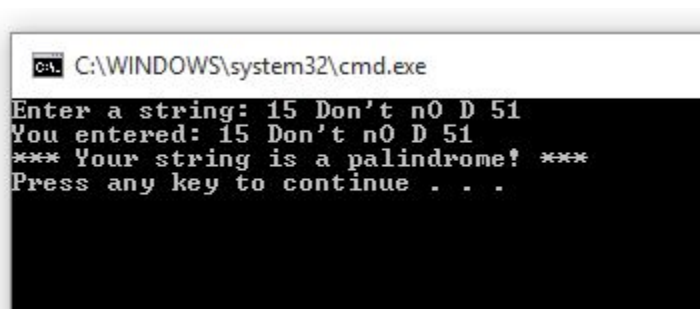
For this assignment, since we are trying to compare if the characters match in reverse order, I used 'isalnum' from the STL to detect only alphabet letters and numbers so that I could ignore punctuation, spaces, and capitalized letters.

Screenshot #1 uses the string in the example provided, and anna is correctly detected as a palindrome.



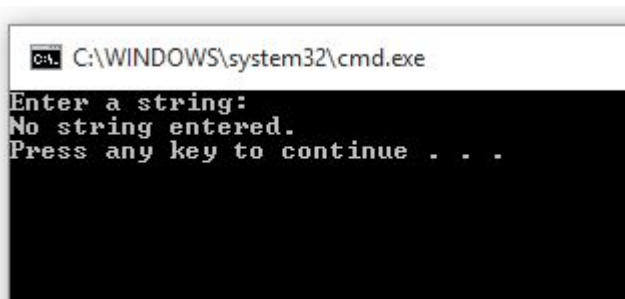
```
C:\WINDOWS\system32\cmd.exe  
Enter a string: anna  
You entered: anna  
*** Your string is a palindrome! ***  
Press any key to continue . . .
```

Screenshot #2 uses a mix of spaces, punctuation, numbers, and upper and lowercase letters and still correctly detects the string as a palindrome.



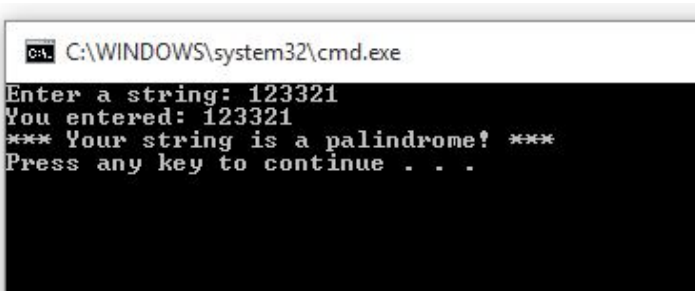
```
C:\WINDOWS\system32\cmd.exe  
Enter a string: 15 Don't n0 D 51  
You entered: 15 Don't n0 D 51  
*** Your string is a palindrome! ***  
Press any key to continue . . .
```

Screenshot #3 correctly detects if no string was entered by the user.



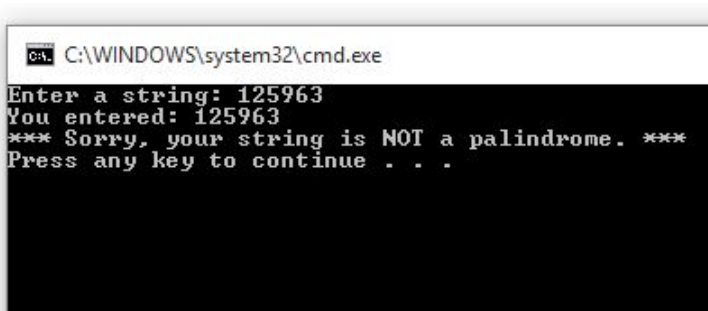
```
C:\WINDOWS\system32\cmd.exe  
Enter a string:  
No string entered.  
Press any key to continue . . .
```

Screenshot #4 correctly detects just numbers that are in palindrome order.



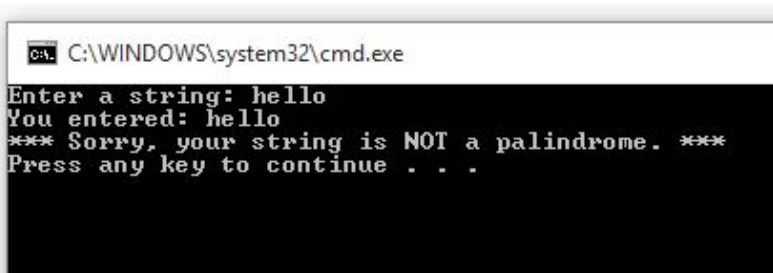
```
C:\WINDOWS\system32\cmd.exe
Enter a string: 123321
You entered: 123321
*** Your string is a palindrome! ***
Press any key to continue . . .
```

Screenshot #5 correctly detects numbers that is NOT a palindrome.



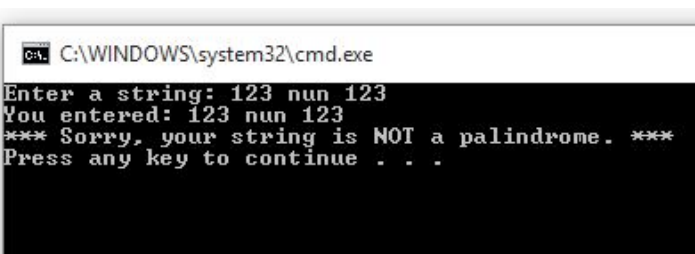
```
C:\WINDOWS\system32\cmd.exe
Enter a string: 125963
You entered: 125963
*** Sorry, your string is NOT a palindrome. ***
Press any key to continue . . .
```

Screenshot #6 correctly detects a string that is NOT a palindrome.



```
C:\WINDOWS\system32\cmd.exe
Enter a string: hello
You entered: hello
*** Sorry, your string is NOT a palindrome. ***
Press any key to continue . . .
```

Screenshot #7 correctly detects a string with mixed alpha and nums as NOT a palindrome because the numbers are not in correct reverse order.



```
C:\WINDOWS\system32\cmd.exe
Enter a string: 123 nun 123
You entered: 123 nun 123
*** Sorry, your string is NOT a palindrome. ***
Press any key to continue . . .
```