

Question 1

This program (*palindrome.cpp*) takes any string of characters from a user and returns whether or not the string is a palindrome. It does not consider spaces, tabs, special characters, or punctuation. It does this by storing the user input in two separate data structures, a queue and a stack. By removing the top or next elements of each structure and comparing them, the program can detect whether the string is a palindrome.

Sample I/O

```
Enter a string:
Here is a string!
'Here is a string!' is NOT a palindrome.

Enter a string:
Madam, I'm Adam
'Madam I'm Adam' is a palindrome!
```

Question 2

vector_reverse.cpp contains methods to reverse the contents of a vector of any type. It takes the original vector as a reference and reverses its contents.

Sample I/O

```
Original int vector: 142365
Reversed int vector: 563241

Original char vector: cfab
Reversed char vector: bafc

Original double vector: 1.1 2.2
Reversed double vector: 2.2 1.1

Original float vector: 1.81 2.989 -0.123
Reversed float vector: -0.123 2.989 1.81

Original bool vector: 1 1 0
Reversed bool vector: 0 1 1
```