

CS 150 Lab 12

Character Arrays and Output Files

The objective of today's lab is to use character arrays and output files.

- Be sure your output looks exactly like the specified output.
- Be sure to submit the completed project to CS150-01 Lab by Friday at 5pm.
- Be sure to follow the coding standards and add comments to your code!

Lab 12.1

Write a complete C++ program in a project **12_1_Character Arrays** that will read in text from a file called **text.txt** one line at a time. Each line will be placed into a character array. You will then produce an output file called **output.txt** that will contain the original line, the length of the line, the line reversed, the line with the spaces removed (OPTIONAL CHALLENGE) and a determination if the line is a palindrome or not (OPTIONAL CHALLENGE).

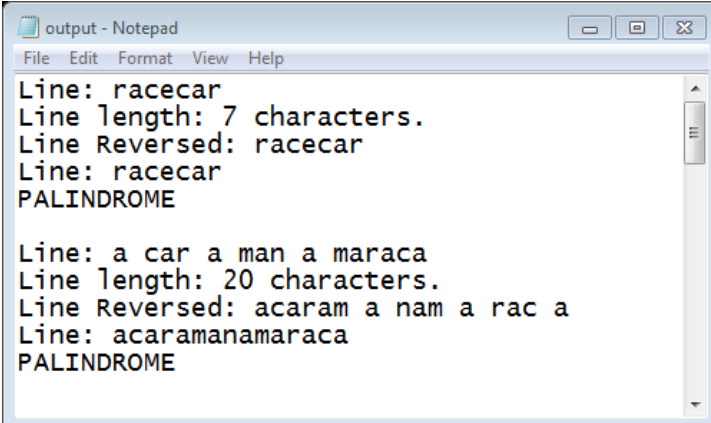
You will find the solution to this program partly completed in the CS150-01 Public folder in a file called **12lab.cpp**. You are to copy this code into your project and complete the program by writing all of the function definitions as described in the function header comments.

You will also find an input file to test with your program. The input file is called **12input.txt**. Copy the contents of this file into the input file for your project called **text.txt**.

The input file:

```
racecar
a car a man a maraca
```

Will produce this output file:



```
output - Notepad
File Edit Format View Help
Line: racecar
Line length: 7 characters.
Line Reversed: racecar
Line: racecar
PALINDROME

Line: a car a man a maraca
Line length: 20 characters.
Line Reversed: acaram a nam a rac a
Line: acaramanamaraca
PALINDROME
```

- 1) Your program is to compile without any errors or warnings.
- 2) The entire program is to be documented/commented.

Once your project is complete, place your solution PUNetIDLabs into the CS150-01 Drop folder on Turing. Your solution is to have ALL previous projects completely working and correct.