

Lab 4 preview

Strings and vectors

13 February 2025

The preview for this lab is given below. Come to lab on Thursday either with it completed or with a specific written question in your notebook identifying which preview step you got to and what about it you're stuck on.

The first program in this week's lab will be on codeboard, and it will read a single string—specifically, it will read one string that doesn't have spaces in it—and print out information about it. Remember to test (submit) your program after each step!

1. First, write the program to read the string and print out the message

```
The word _____ has _ characters.
```

except with the blanks filled in correctly for that string: the string itself and its length (how many characters it has).

2. Add second line to the output that says

```
Its first is '_' and its last is '_'.
```

filling in the blanks with the first and last characters of the string (you can assume it will not be empty).

3. In cases where the string is more than two characters long (and only in those cases), add a third line

```
If you trim the first and last characters it leaves _____.
```

The blank here should have the whole string *except* for its first and last characters.

4. Finally, print one line that says

```
The characters are:
```

and then lines with the characters of the word, in order (each on its own line).

Don't forget to include documentation comments at the top of your program. Attend carefully to punctuation and spelling!