

CS161 Lab 5 Proficiency Demonstrations

Choose one of the following questions:

Question A:

For this problem you may not use the string `.find()` or `.compare()` member functions, since we haven't talked about those in class yet.

Recall that you may use the `getline(cin, my_str)` function to read a string from the user.

Write a program which accepts a line of text from the user (using `getline`).

Now use loops and conditional code to accomplish the following:

1. If the user's string contains the text "dog" (in lowercase characters) then print the index of the 'd' character in dog.
2. Repeat the code until the user enters the string "q".

Extra Credit:

3. If the user's string contains the text "cat" (in lowercase characters) then print the index of the 't' character in cat.
4. If the user's string does not contain either of those words then print "Sorry, could not locate secret words."
5. You do not have to handle the case where both secret words are present.

Sample:

Please enter a string:

My dumb dog is lazy.

Congrats! Found secret entry at index 8.

Please enter a string:

My spectacular cat likes to play with strings.

Congrats! Found secret entry at index 17.

Please enter a string:

q

Goodbye!

Question B:

For this problem you may not use the string `.find()` or `.compare()` member functions, since we haven't talked about those in class yet.

Recall that you may use the `getline(cin, my_str)` function to read a string from the user.

Write a program which accepts a line of text from the user (using `getline`).

Now use loops and conditional code to accomplish the following:

1. Iterate over the user's string until you find a numeric character.
2. Once you find a number, create a sum of all the ASCII values contained in the number (continue to read the numbers until encountering a non-numeric character or until reaching the end of the string).
3. You can assume that the user only enters a single sequence of numbers (i.e. you don't have to deal with a string like: "ODOT: 800-977-6368")
4. Repeat the code until the user enters the string "q".

Sample:

Please enter a string:

My numbers are 183.

The ASCII sum is: 156 \leftarrow (since 1 = ASCII 49, 8 = ASCII 56, and 3 = ASCII 51) **49 + 56 + 51 = 156**

Please enter a string:

There could be 10 ways to solve this question.

The ASCII sum is: 97 \leftarrow (since 1 = ASCII 49, 0 = ASCII 48) **49 + 48 = 97**

Please enter a string:

q

Goodbye!