

CS 161, Lecture ????: C-style String Activity

C-String Functions

- Recall c-style strings are null terminated
- Means we can use c-string library
- We can also make all of these by hand
- Useful
 - Strlen -> length of string up to (not including) null terminator
 - Strcpy -> copies the contents of one c-style string into another
- Get input from user using
 - cin.get() -> takes one character from the buffer at a time (leaves delimiter char in buffer)
 - cin.peek() -> looks at the next thing in the buffer without taking it out
 - cin.getline() -> takes an entire line of determined size
 - cin.ignore() -> dumps everything in the buffer
 - cin.clear() -> resets error flag for buffer



Exercise: String Manipulation with C-style strings

- Design a program which will take a string from the user (c-style string) and remove all duplicate letters occurring in the string. You should only use the exact amount of memory you need at any given time. Your program should not take input from the user during runtime unless there is an error.
 - What functions will we need?
 - What kind of memory should we use?
 - Write the function prototypes.

get_input — command line args

→ argc, char** argv

↓
2

if argc != 2

→ get_input

else

argv[1] store it into a var we will use



↳ c style strings

while (cin.getch() != '\n')
add_char

remove_dups

Option 1: any dup gets 10

How to check: nested loop

if cur == future

mark future

Option 2: create a frequency chart to determine which letters appear more than once

Option 3: sort then remove

Demo