

Due: Friday, November 21.

Written: 4:00pm in 2131 Kemper.

Programs: 11:59pm using handin to cs30a p6 directory.

Filenames: mmcode.c, sort_str_len.c, plurals.c, and prefix.c

Written: #1, #2, #3, #4, #8, #9, #10 on pages 494 – 495.

Programming. All programs should be able to compile with no warnings when compiled with the `-Wall` option. You should put your name(s) in a comment on the first line of each file. The prompts, and output format of each program must match the examples exactly.

(1) Programming problem #1 on page 448. Filename: mmcode.c

```
[davis@lect2 p7]$ mmocode.out
Enter a MMOC product code > ATL1203S14
Warehouse:      ATL
Product:        1203
Qualifiers:     S14
[...@pc...] mmocode.out
Enter a MMOC product code > SFO2009sabJ15
Warehouse:      SFO
Product:        2009sab
Qualifiers:     J15
[davis@lect2 p7]$
```

(2) Programming problem #1 on page 463. Filename: sort_str_len.c

```
[...@pc...]$ sort_str_len.out
Enter number of strings (0 to 50)
> 3
Enter 3 strings on separate lines
pointer
array
address of
```

Input strings

Sorted in length

pointer
address of
array

array
pointer
address of

```
[...@pc...]$ sort_str_len.out
Enter number of strings (0 to 50)
> 4
Enter 4 strings on separate lines
Does it exist?
Time.
What should we do without it?
I gravely doubt it.
```

Input strings

Sorted in length

Does it exist?
Time.
What should we do without it?
I gravely doubt it.
[...@pc...]

Time.
Does it exist?
I gravely doubt it.
What should we do without it?

(3) Problem #5 on page 497. Filename: plurals.c

```
[...@pc...]$ plurals.out
Please enter a noun ("Done" = exit): chair
The plural of chair is chairs.
Please enter a noun ("Done" = exit): dairy
The plural of dairy is dairies.
Please enter a noun ("Done" = exit): boss
The plural of boss is bosses.
Please enter a noun ("Done" = exit): circus
The plural of circus is circuses.
Please enter a noun ("Done" = exit): fly
The plural of fly is flies.
Please enter a noun ("Done" = exit): dog
The plural of dog is dogs.
Please enter a noun ("Done" = exit): church
The plural of church is churches.
Please enter a noun ("Done" = exit): clue
The plural of clue is clues.
Please enter a noun ("Done" = exit): dish
The plural of dish is dishes.
Please enter a noun ("Done" = exit): Done
[...@pc...]$
```

(4) Problem #8 on page 498 Filename: prefix.c

Hint: just went through the two arrays character by character.

```
[...@pc...]$ prefix.out
Please enter two words: global glossary
The longest common prefix of global and glossary is glo.
[...@pc...]$ prefix.out
Please enter two words: department depart
The longest common prefix of department and depart is depart.
[...@pc...]$ prefix.out
Please enter two words: glove dove
The longest common prefix of glove and dove is .
[...@pc...]$ prefix.out
Please enter two words: lover love
The longest common prefix of lover and love is love.
[...@pc...]$ prefix.out
Please enter two words: long longer
The longest common prefix of long and longer is long.
[...@pc...]
```