ECS 36A, April 24, 2023

Announcements

- Midterm study guide, sample midterm are on Canvas
  - Sample midterm is shorter than the real one will be
  - I will post answers to it on Friday
- On problem 2 of the homework, and the extra credit, lots of folks are getting the following error message:
  - The autograder failed to execute correctly, Please ensure that your submission is valid. Contact your course staff for help in debugging this issue.
  - The problem is that you have an infinite loop.
  - Most common reason for extra credit: not taking a negative decrement into account. Try "loopier 50 5 -10" and see what happens.

++, --

- How they work depends on if they come before or. after the value
- If before, use the value of the variable and *then* increment or decrement the variable
- If after, increment or decrement the value of the variable and *then* use the value
- Examples (assume a = 5 initially)
  - x = ++a; x is 6, a is 6
  - x = a++; x is 5, a is 6
  - x = --a; x is 4, a is 4
  - x = a--; x is 5, a is 4

Evaluation of Arguments to Functions

- The order is not defined; it is usually left to right or right to left
    - But it could be much weirder . . .
- Example: suppose x is 5

```
printf("%d %d\n", ++x, ++x)
```

could print 6 7 or 7 6

Converting Chars to Numbers

- Convert printing char to integer
- ch – '0'
- Convert integer (between 0 and 9 inclusive) to printing char
- ch + '0'
- Find out which number a letter of the alphabet is
- ch – 'a' (for lower case), ch – 'A' (for upper case)
- Find out which letter of the alphabet a number between 0 and 25 inclusive) is
- ch + 'a' (for lower case), ch + 'A' (for upper case)