CS 161
Introduction to CS I
Lecture 24

- What we learned from Midterm 2

- Recursion

Week 9 tips

- This week
  - Assignment 5 peer reviews – due Weds. 3/4 at midnight
  - Study session – Thursday 3/5 from 6-7 p.m. in LINC 268
  - Assignment 5 – due Sunday 3/8 at midnight
- Beyond week 9
  - Proficiency demo – week 10
  - Makeup assignment (6) – week 10
  - Final exam – Monday 3/16 from 6-7:50 p.m. in LINC 128

Midterm 2 solutions

- **Your opportunity to fill in gaps in understanding**
  - Use any errors to highlight what to you can spend more time on
- Solutions (forms 1 and 2) are posted on course website
  - Calendar -> 03/02 (lecture 24)
  - Direct links:
    http://classes.engr.oregonstate.edu/eecs/winter2020/cs161-020/calendar/CS161_Midterm_2_W20_form1_soln.pdf
    http://classes.engr.oregonstate.edu/eecs/winter2020/cs161-020/calendar/CS161_Midterm_2_W20_form2_soln.pdf
- Midterms for pickup on Wednesday
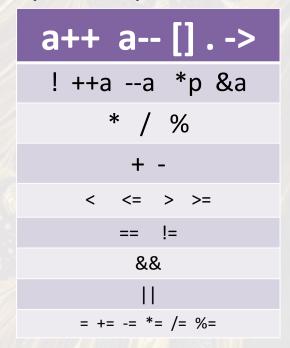
Midterm 2 solutions

- Return type of a function (Q11, form 1)
- Function overloading (Q12, form 1)
- Dangling pointer vs. memory leak (Q14, form 1)
- Order of freeing 2D array (Q18, form 1)
- Allocate hobbit holes (Q19, form 1)
- Pointer to item on the stack (Q20, form 1)
- If/else – only one branch can execute (Q21, form 1)

Midterm 2 solutions

Operator precedence

- What type is given by "new int"? (Q23, form 1)

- Precedence of dereference vs. indexing (Q30, form 1)
  - Recall lab 6: why did you have to do (*r)[3] instead of *r[3] for string* r?

- Boolean expressions (Q32, form1)

- Pass by value does not change variable (Q33, form 1)

a++ a-- [] . ->
! ++a --a *p &a
* / %
+ -
<   <=   >   >=
==   !=
&&
||
= += -= *= /= %=

Midterm 2 solutions

- Declaring references and pointers (Q35, form 1)
- Extra credit

Week 9 begins!

❑ Attend lab (laptop required)

❑ Read **Midterm 2 solutions**

❑ **Assignment 5 peer reviews** (due **Wednesday, March 4**)

❑ Study session Thursday – see worksheet on calendar

See you Wednesday!