

CS61A

HIGHER-ORDER FUNCTIONS

LOGISTICS AND REMINDERS

- ▶ Lab02 due **Today**
- ▶ Hog project due **next Monday(7/6)**
 - ▶ Phase 1 due **Friday**
 - ▶ Submit **Sunday(7/5)** for 1 pt EC
- ▶ HW03 due **next Tuesday (7/7)**
- ▶ **No discussion Friday**, Good luck on your diagnostic this **Thursday**
- ▶ Okpy?

AGENDA

- ▶ Higher-Order Functions
- ▶ Lambda Functions

I KNOW WHY

I DON'T KNOW WHY

**MY CODE
RUNS**



**MY CODE
DOESN'T
RUN**



HIGHER ORDER FUNCTIONS

- ▶ Functions that take functions as inputs or return functions as outputs
- ▶ Function call in the return line is different than returning a function
- ▶ Self-reference is a function that returns itself (like commentary functions in Hog)

LAMBDA FUNCTIONS

- ▶ `lambda : print(3)`
- ▶ `lambda x: x ** 2`
- ▶ `lambda x, y, z : x + y - z`
- ▶ `lambda x: lambda y: x + y`

Just a shortcut of writing def statements for lazy people!

THANKS FOR COMING

- ▶ Make sure to fill out the attendance form
 - ▶ links.cs61a.org/aman-disc
- ▶ Slides are located at links.cs61a.org/aman