

DS2000

1/27 - Fri

Admin

- HW2 due 9pm
- HW3 out now

Agenda

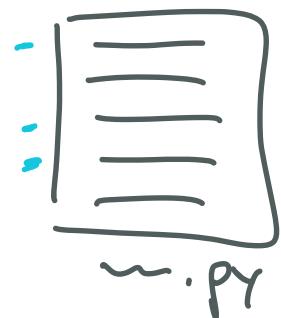
1. Loop Structure
2. while loop practice
3. Python

1. Loop structure

Last time...

```
if condition:
    #do a thing
```

Flow of control



Today...

```
while condition:
    #do a thing
```



write code once,
execute ⏪ many times?

Use of while loops #1

while condition :
any ← #do a thing
code

1. check condition
2. If True, do the thing
3. If False, end the loop!

English: keep buying lottery tickets until
I have \$1 million

Python: while I don't have \$million,
buy a lottery ticket

Use of loops #2: Read from a file

- useful where we don't need to remember every data point at the same time
 - Run forever
 - read from file using `readline`
 - Are we at the end of the file?
If so, end the loop with break

Python we need

- `while`
- `break`
-

$x = 5$
 $x = x + 1$ } something!
 $x += 1$

joinpd.com
hiz ing