CS21: INTRODUCTION TO COMPUTER SCIENCE

Prof. Mathieson
Fall 2017
Swarthmore College
Outline Sept 27:

- Hand back Lab 2
- Go over: min_max_range.py
- While loops
- Indexing practice
- Next week: graphics

Notes

- Lab 3 due Saturday night
- No office hours today
- Ninja session 7-9pm tonight
While loops
Format for a while loop

while loop:
    combine loop with conditional.

valid = False
while not valid:
    input(....)

# initialize variable(s)
while <condition>:
    # body
    # update flip...

# initialize (flip = "T")
Example of while vs. for loops for the same task

*Implicitly* assigning $i = 0$ initially

```python
for i in range(len(lst)):
    print(lst[i])
```

In a while loop, we need to *explicitly* initialize the variable(s) we’ll be using in the condition

```python
i = 0
while i < len(lst):
    print(lst[i])
    i = i + 1
```
While loop practice problems

- cs21/week04/while_random.py
- cs21/week04/guess_number.py
- cs21/practice/while_challenge.py
- cs21/practice/student_computer.py (indexing)