CS 160
CS Orientation

Finish Repetition and Strings

Begin Functions

Odds and Ends

- Demo Assignment #5 this week!!!

- Videos:
  - https://code.org/educate/resources/videos

- Visualize your Code:
  http://pythontutor.com/visualize.html#mode=edit

Oregon State University

In-class Exercise #4

- Get into groups of 4-5.
- Explain what each of line in this code does and tell me what the output is:

```
y=0;
for x in range(10):
    if(x%2):
        y=y+1;
print(y);
```

What happens when you enter bad data?

- Where/when does the error occur?

Strings

- Create a string

  my_string="hello";

- Access a character

  my_string[0] #gives you first character

- Length

  len(my_string)

Demo…

OSU Oregon State University

In-class Exercise #4 cont…

- Without using a built-in function to do the checking for you…

  – How will you make sure you get a good positive integer from the user?

  – How will you make sure you get a good integer from the user?

  – How will you make sure you get a good floating point number from the user?

Demo…

More practice with loops…

- Write a nested loop that displays 10 rows of '#'. There should be 15 '#' on each row.

- Ask the user for the speed of a vehicle and how many hours it has been travelling. Print out how far the vehicle has gone each hour. Ask the user if they want to perform another calculation.

Decomposition

- What is it?

- What are functions?

- Examples of daily life functions???

Pre-Defined Functions

- May need to import a library

- Use the function from library/object

- Example:

  import math

  math.sqrt(4)

Programming Demo/Functions