CS 160
CS Orientation

Finish Repetition and Strings
Begin Functions
Odds and Ends

• Demo Assignment #4 this week!!!
• Get help early!!!

• Videos:
  – https://code.org/educate/resources/videos

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

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

3
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...
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?
Demo...
In-class Exercise #4 cont...

• Write a loop (or loops) to print the following picture:

```python
print("   *");
print(" *** ");
print(" ***** ");
print("********");
```
Demo...
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:
  
  ```python
  import math
  math.sqrt(4)
  ```
Programming Demo/Functions