

# CS 160

## CS Orientation

Finish Repetition and Strings  
Begin Functions

# 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?
  - 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...

# 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

# 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.