```
# variables are just nicknames, they are plain lower case words
name = "Naveen Qureshi"

# + plus, minus -, * multiple, / divide, **exponent, >, < and more!
# =! Means is not equal to
# float(42) will give u 42.0 if you do int(42.0) you get back 42
# this is not the same as rounding, it just cuts off past that dec pt

# You can use input function to assign an input to a variable and store it
# print(f"{name} you are {age_in_dog_years} years old in dog years. Woof!")
# this is called the f string where you can bring variables into your string – very useful!!

# the_count = [1, 2, 3, 4, 5]
# a list always have sq brackets. commas in between elements
# people = []
# people.append("Mattan")
# people.append("Sarah")
```

Functions

- .append allows you to add things to lists
- .remove to remove things from lists
- .upper allows you to uppercase
- .lower allows you to use lower case
- .split allows you to split things in a list
- Import random and then use random.choice(list name) to get random items from a list (used this to determine who should go to Amazon visit! 😊) and random.shuffle shuffles items within a list randomly
- number % number == 0 will give you a true or false response and can be used in cases like FizzBuzz

If/Else/Elif can be used in the following way:

```
answer = input("Do you want to hear a joke? ")
if answer == "Yes":
    print("I'm against picketing, but I don't know how to show it.")
    # - Mitch Hedberg
elif answer == "No":
    print("Fine.")
else:
    print("I don't understand.")
```

You can define things in Python – this is VERY POWERFUL

```
def IntorFloat(string_input):
    try:
        float_input = float(string_input)
    except ValueError:
        print("Please input a number, this is not a valid input")

def reverse(text):
    return text[::-1]
print(reverse("Naveen"))

def is_palindrome(text):
    return text.lower() == reverse(text).lower()
print(is_palindrome("Naveen"))
```

Always note down what use cases/test cases you used to test your code.

```
# # Test cases:
# #1. 2
# #2. jkfnkasd
# #3. 1000000000000
```

Dictionaries

```
# # You can use dictionaries to store sets of key/value pairs
# states = {'NY': 'New York', 'PA': 'Pennsylvania', 'CA': 'California'}

# You can import from another file with import
import class3_functions
# You can import a specific function or functions from another file
from class3_functions import intro, divisible_by
```

Weather API!

```
import forecastio
from geopy.geocoders import Nominatim

def get_current_weather(address):
    api_key = "173ef6c563749fb8f469085d79ad03e1"
```

Using APIs to send texts

https://twilio.com/user/account - can find SID and Auth token

```
from twilio.rest import Client
account_sid = ""
auth_token = ""
```

create a variable that sends both account sid and token and define what text you want to send!