This sheet is intended to give you a brief overview of most of what we did

1. Variables:
 To save something to a variable you say:

variableName = 5
Or
variableName = 'Hello'
Or you can assign it to user input
variableName = input('Please enter something ')

You can assign variables to anything that will give you a value

2. Input:
To ask a user for input you call the input function and give it a question

name = input('Please enter your name ')

3. Print:
To print something to the console you call the print function and give it whatever you want printed

print("Hello my name is Maddie")
You can also use print with variables

name = 'Maddie'
print("Hello my name is " + name)

4. Lists:
Lists are a data structure that will hold a bunch of values
You declare a list with [ ], and you can save it to a variable

groceries = ['apple', 'banana', 'broccoli', 'milk']
print(groceries[0]) -> apple
You can also store variables in a list like we did with our MadLib program!

5. Loops:
for num in [1, 2, 3, 4]
        print(num)
This prints out:
1
2

3
4

For loops are a way to do some code a specified number of times

6. Functions:
Functions help with code duplication. When you write a function you can call that function instead of writing the same code over and over again

```
def square(self, size):
        for i in [1, 2, 3, 4]:
                turtle.forward(size)
                turtle.turn(90)
square(5)
square (10)
```

This will draw a square with length 5 and then a square with length 10

7. If statements:
If statements are a way to have code execute only if something is true

```
if name == 'Maddie':
        print('Hello Maddie')
```

To compare things we have:
- ==
- <=
- =>

We also can use not, and, (and) or

8. Functions
To define a function we do: def function_name():
Then to use that function we call it by typing: function_name()