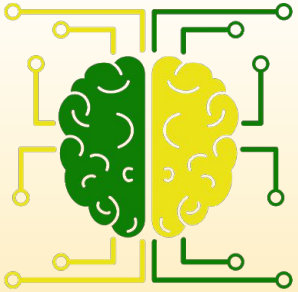
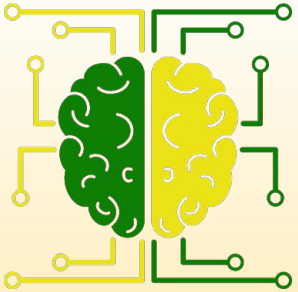


NEURALBERTATECH

Presents:



Basic Functions, Booleans, and If

September 24th, 2019

Created by Eden Redman & Zach Selk

Function Format

Does a thing

May or may not define a new value

function_name(arguement_1,arguement_2,...)

+ - / * // **

Print

print(“hELLOW wORLD”)

Import

```
import numpy
```

No package found?

```
>conda activate myenv
```

Function Format

Does a thing

May or may not define a new value

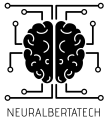
function_name(arguement_1,arguement_2,...)

x = function_name(arguement_1,arguement_2,...)

Absolute Value

x = -7

x = abs(x)



Searching Array

list = [1,6,3,8,1]

min(list)

?

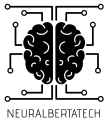
list_min = min(list)

Try max()

Changing Data Type

```
x = 3.14

x = int(x)
```



Functions from Packages

a = [1,2,3]

b = [4,5,6]

np.add(a,b)

Custom Functions

```
def sum(a,b):
    x = a+b
    return x



sum(c,d)

x = sum(c,d)
```

Booleans

Booleans are used to represent basic logic in programs

- True
- False

Booleans with Arithmetic Operators

In [1]: 1 == 2

False

In [2]: 1 < 2

True

In [3]: 1 != 1

False

In [4]: 1 <= 1

True

Booleans with Arithmetic Operators (Cont.)

In [5]: 1 >= 1

True

In [6]: 1 > 5

False

Boolean Operators (and)

In [1]: True and True

True

In [2]: True and False

False

In [3]: False and False

False

Boolean Operators (or)

In [1]: True or True

True

In [2]: False or False

False

In [3]: True or False

True

Boolean Operators (not)

In [1]: not True

False

In [2]: not False

True

Control Flow (if)

In [1]: if True:

```
print(“Hello”)
```

```
Hello
```

In [2]: if False:

```
print(“Nothing”)
```

Control Flow (Cont.)

```
In [3]: x = 10

In [4]: if x < 5:
            print("x is less than 5")
        else:
            print("x is greater than or equal to 5")

x is greater than or equal to 5
```

Control Flow (Cont.)

```
In [5]: if x > 5 and x < 20:
            print("5 < x < 20")
        else:
            print("x is either less than 5 or greater than 20")
```

```
5 < x < 20
```

Control Flow (Cont.)

```
In [6]: if x < 1:
            print("x is less than 1")
        elif x > 5:
            print("x is greater than 5")
        Else:
            print("1 < x < 5")
```

```
x is greater than 5
```

Homework

Guess a random number between a and b

With x number of tries, feedback on each guess

Feedback Survey! We want to hear from you!

Feedback Survey