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Class 2 Homework

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1. What is the difference between append and extend

Append adds its argument as a single element to the end of a list. The length of the list itself will increase by one.

x = [1, 2, 3]

x.append([4, 5])

print (x)

gives you: [1, 2, 3, [4, 5]]

Extend iterates over its argument adding each element to the list, extending the list. The length of the list will increase by however many elements were in the iterable argument.

x = [1, 2, 3]

x.extend([4, 5])

print (x)

gives you: [1, 2, 3, 4, 5]

1. What are logical operations?

AND – x and y – true if both are true

OR – x or y – true if either is true

NOT – not x – true if false

X= 1

Y= 2

X and Y

Gives you: 2

It checks that X is true. X=1 is valid, so it is true. Because it is true, it moves on to Y=2. Also true. So result is the value for Y, 2.

Y and X

Gives you: 1

Print(x<5 and y<5)

Result: true

Print(x<5 and y>5)

Result: false

X or Y

Gives you: 1

Checks if the first is true. It is, done. Result is the value for the first item, X, 1.

Y or X

Gives you: 2

Print(x<5 or y<5)

Result: true

Print(x<5 or y>5)

Result: true

Print(x>5 or y>5)

Result: false

Not X

Gives you: false  
X is valid, so X=X is true, so Not X is false.

Print(Not X > 5)

Gives you: true

X<5, so X>5 is false, so Not x > 5 is true.

1. Consider the variable G, and find the first index of the sub-string snow:

G = "Mary had a little lamb Little lamb, little lamb Mary had a little lamb  
Its fleece was white as snow And everywhere that Mary went Mary went, Mary went  
Everywhere that Mary went The lamb was sure to go”

There are 2 ways to do this

First, create variable G. I didn’t know how to do this for it to show on different lines like above.

G= 'Mary had a little lamb Little lamb, little lamb Mary had a little lamb Its fleece was white as snow And everywhere that Mary went Mary went, Mary went Everywhere that Mary went The lamb was sure to go'

Then, use the find or index method.

G.find('snow')

Or

G.index('snow')

Either way, result is 95.