Python Review

Boolean expressions

```
print(2 > 1)
print(5 % 2 == 0)
print(not 5 % 2 == 0)
print(2 > 1 or 2 < 1)
print(True or False)
print(5 % 2 == 0 or 5 % 3 == 0)
print(2 > 1 \text{ and } 2 < 1)
print(True and False)
print(False and False)
```

Functions vs. Methods

```
message = "Hello World!"
print(message)
print(type(message))
print(message.lower().upper().title())
```

Defining functions with arguments

```
def main():
    n1 = 1
   n2 = 2
   n3 = 3
    print(function(n1, n2, n3))
    print(function(1, 2, 3))
    print(function(a = n1, b = n2, c = n3))
    print(function(b = n2, a = n1, c = n3))
def function(a, b, c):
    return b
main()
```

```
def function1():
    return x
def function2(x):
    return x
def function3():
   x = 1
    return x
def function4(x=0):
    return x
function1()
function1(1)
function2()
function2(1)
function3()
function3(1)
function4()
function4(1)
```

Where should we call main()?

```
# 1

def main():
    hello()

# 2

def hello():
    print("Hello World!")

# 3
```

return to break out of a function

```
def main():
    print("Hello World!")
    return # equivalent to "return None"
    print("Goodbye World!")

main()
print(main())
```

Indentation matters

```
def function():
    if condition1:
        do_something()
        if condition2:
            do_something_else()
        else:
            for item in lst:
                do_something()
    return something
```

Quiz prep

- 1. Review the slides and code examples (No DataCamp)
- 2. Mock exam on Ed
- 3. Post questions on Ed

Quiz format

- Closed book
- Part1: 30 minutes, 20 questions * 3 points each = 60 points
- Part2: 60 minutes, 8 questions * 5 points each = 40 points
 - 8 functions to complete
 - Later functions build on earlier functions
 - You will be provided with the correct versions of earlier functions in subsequent questions
- Click "Submit" for each question



