Python Flow Control

Boolean Operators

REVIEW: Use Comparison Operators for Control Flow

Operator	Meaning
==	Equal to
!=	No equal to
<	Less than
>	Greater than
<=	Less than or equal to
>=	Greater than or equal to

>, <, >=, <= work only with integer or floating numbers

REVIEW: Boolean Values

- Only has two values: **True** and **False**
- Type case exactly as above: Capital T and Capital F.

Boolean Operators

- **and**
- **or**
- **not**

and Operator – when you use “and”, all conditions must be True

if firstCondition and secondCondition:		
First condition is	**Second condition is**	**Statement is**
True	**True**	**True**
True	**False**	**False**
False	**True**	**False**
False	**False**	**False**

or Operator – when you use “or”, just one condition must be True

if firstCondition or secondCondition:		
First condition is	**Second condition is**	**Statement is**
True	**True**	**True**
True	**False**	**True**
False	**True**	**True**
False	**False**	**False**

not Operator

Operator	Evaluates to
not True	False
not False	True

Order of Operations

1. Math and Comparison Operators
2. not
3. and
4. or

If you win the lottery and the prize is over a million dollars then retire to a life of luxury.

- Sometimes the decision on whether to take the next step depends on a combination of factors.
- I can only retire if I win the lottery and the prize was over a million dollars.

The “and” is only evaluated as True if both conditions are True

```
wonLottery = True
bigWin = True

#print statement only executes if both conditions are True.

if wonLottery and bigWin:
        print(“You can retire”)
```

Multiple if conditions

```
arg1 = int(input(“Enter 1st number”))
arg2 = int(input(“Enter 2nd number”))

if arg1 == 1 and arg2 == 2:
    print(“You are correct”)
```

Multiple if conditions

```
arg1 = int(input(“Enter 1st number”))
arg2 = int(input(“Enter 2nd number”))
arg3 = int(input(“Enter 3rd number”))

if (arg1 == 1) and (arg2 == 2) and (arg 3 == 3):
        print(“You are correct”)
```