

Python on Trinket – Lesson 6

Review

- Conditions
- User input

Discussion

- Mathematical operators

- o Operators can manipulate values (operands)
- o Arithmetic operators
 - o +, -, *, **, /, %

Addition	+	$a + b = 10$
Subtraction	-	$x - y = -5$
Multiplication	*	$a * b = 20$
Exponent	**	$x^3 = 8$
Division	/	$b / a = 10$
Modulus	%	$b \% a = 2$

- o Comparison (relational) operators
 - o ==, !=, >, <, >=, <=
- o Assignment operators
 - =, +=, -=, *=, /=

- Lists

- o A sequence of values, grouped together under a single name
 - o Access values by referencing their position in the list
 - o i.e.
 - names = ["Jacob", "Joanna", "Kathy"]
 - names[1] = "Joanna"
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Lesson

Count down (operators)	
<pre>import time def count_down(): sec = 10 for count in range(sec): print(sec) sec -= 1 time.sleep(1) return</pre>	<pre>10 9 8 7 6 5 4 3 2 1</pre>

Practice

- Mad Libs: Create a function which prints out a story, filled in with words provided by the user. Ask your classmates to fill in words to complete the story.

Mad libs (Lists)	
<pre>def mad_libs(words): print("Once upon a time in the land of " + words[0] + ", people became confused. " + "There were so many " + words[1] + ", but not enough " + words[2] + ".") return words = ["", "", ""] categories = ["place", "thing(plural)", "thing(plural)"] for count in range(len(categories)): words[count] = input("Enter a " + categories[count]) mad_libs(words)</pre>	<pre>Enter a place: Candy Land Enter a thing(plural): coconuts Enter a thing(plural): beluga whales Once upon a time in the land of Candy Land, people became confused. There were so many coconuts, but not enough beluga whales.</pre>