

Loops and the Accumulator Pattern

<pre># What is the output of the following code? total = 0 for i in range(1,6): print(i) total = total * i print(total)</pre>	
<pre># What is the output of the following code? str1 = "LAB7" str2 = "" for i in str1: str2 = str2 * 2 + i print(str2)</pre>	
<pre># revisiting midterm questions def make_lower(s): return s.lower() # Line 1 def main(): name = "Chaitan" print("Hello " + name) # Line 2 low = make_lower(name) print("Hello " + low) # Line 3 for num in range(len(name)): low2 = make_lower("Hello " + str(num)) print(low2) if __name__ == "__main__": main() # Line 4</pre>	
<pre>mountain = "BearPeak" ocean = "Atlantic" for index in range(len(mountain)): print(mountain[index] + ocean[index])</pre>	
<pre>word = "giraffe" converted = "" for element in range(len(word) - 1, -1, -2): converted = converted + word[element] print(element) print(converted)</pre>	

Conditionals (if/else statements)

1) What do we know about the variables x and y at the designated points in the code?

	Point A	Point B
<pre>if x < 100: # point A print("giraffe") else: # point B print("alligator") print("hippopotamus")</pre>		
<pre>if x % 2 == 0 and x > 100: # point A print("giraffe") else: # point B print("alligator") print("hippopotamus")</pre>		
<pre>if x % 2 == 0 or x > 100: # point A print("giraffe") else: # point B print("alligator") print("hippopotamus")</pre>		
<pre>if x * y < 0: # point A print("giraffe") elif y > x: print("lion") else: # point B print("alligator") print("hippopotamus")</pre>		
<pre>if x == y or x != y: # point A print("giraffe") else: # point B print("alligator") print("hippopotamus")</pre>		

2) The `len()` function helps us figure out how long strings are. Write a function called `are_same_length` that tests to see if two strings are the same length. This function should **return** a **boolean**.