**Class 6**

**Key Ideas**

* For loops are used in Python as a counted loop, in which an action is executed a specified number of times
* The easiest way to specify how many times to execute the action is using the **range** function
* The statements in the action must be indented to the same level
* For loops can be used to loop through all elements in a sequence (e.g., a list or string), and perform the same operation on each element
* An application of a loop is to calculate a running sum
* A running sum is initialized (usually to 0), and then every time in the action of the loop, another number is added to the running sum

**Built-ins**

**Functions**

**range:** generates a sequence

**range(n)**: generates the sequence of n integers consisting of 0, 1, 2, 3, …, n-1

**Statements**

**for:** repeats an action a specified number of times

**Assessment Questions**

For the following for loop:

for i in range(4):

print('\*&!')

How many times will the action be executed?

0

1

2

3

4

5

True/False: The action of a for loop must always use the iterator variable in some way.