

DRILL: Python range function

DATA:

The Python `range()` function generates a list of numbers, which is generally used to iterate over with for loops. In other words, using it creates the list of index numbers that you can then use in a for loop.

The `range()` function has two different sets of parameters that can be used, as follows:

- **`range(stop)`**
- stop: Number of integers (whole numbers) to generate, starting from zero. eg. `range(3) == [0, 1, 2]`.
- **`range([start], stop[, step])`**
- start: Starting number of the sequence.
- stop: Generate numbers up to, but not including this number. So when you use for i in `range(10, 0, -4)` it will stop just before 0 that is 2 in this case. ie. `range(10,0,-4)==[10,6,2]`
- step: Difference between each number in the sequence. This is basically the 'count by' number.

Note that:

- All parameters must be integers.
- All parameters can be positive or negative.
- The stop parameter is not the number the function will stop on. It specifies that it
- will stop on the Nth number produced, where stop is the Nth number.

Example:

```
1 >>> my_list = ['one', 'two', 'three', 'four', 'five']
2 >>> my_list_len = len(my_list)
3 >>> for i in range(0, my_list_len):
4 ... print(my_list[i])
5 ...
6 one
7 two
8 three
9 four
10 five
```

DRILLS:

1. Start IDLE and use the Python `range()` function with one parameter to display the following:

0
1
2
3

When this is working show it to your instructor.

2. Use the Python `range()` function with 3 parameters to display the following:
3 2 1 0

When this is working show it to your instructor.

3. Use the Python `range()` function with 3 parameters to display the following:
8 6 4 2

When this is working show it to your instructor.