# range

## The Built-in Function: range

Python has a built-in function called `range` that is useful to use when you want to generate a sequence of numbers. You can type `help(range)` in IDLE if you ever need a reminder.

The example below will print the integers 0 to 9, inclusive.

```
for i in range(10):
    print (i)
```

The form of `range` is:

```
range([start,] stop[, step]):
    return a virtual sequence of numbers from start to stop by step
```

## Applications of Range

There are other options you can specify to `range`. One option is to let range generate the numbers corresponding to indices of a string or a list.

```
s = 'computer science'
for i in range(len(s)):
    print(i)
```

You can also tell `range` what index to start at. For instance, the example below starts at index 1 (as opposed to the default which is 0).

```
for i in range(1, len(s)):
        print(i)
```

You can even specify the "step" for `range`. The default stepping size is 1, which means that numbers increment by 1. The example below starts at index 1 and its step size is there (goes to every third index).

```
for i in range(1, len(s), 3):
    print(i)
```

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