

range

- Used with a for loop to iterate over a sequence of numbers.

```
for num in range(start, stop, step):
```

- Assigns numeric value from the range to num.
- Possible to specify starting value (default 0), stopping value (must be provided), and the step (default 1)
- Useful in cases where a numerical iteration is desired

```
for index in range(0, len(devices_list)):
```

```
    # do something with device indexes
```



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There are times when you wish to iterate through a sequence of numbers, rather than through a sequence of lines in a file, or items in a data structure.

Using `range` allows you to iterate across a sequence of numerical values, specifying a starting value, a stopping value, and a 'step' value.

```
for num in range(start, stop, step):
```

The variable `num` will initially be set to the start value, and every iteration `num` will be incremented by the step value. Iteration will stop when `num` reaches the stop value. You can omit the start value (default is 0), and the step value (default is 1). The stop value must be specified.

Using `range` can be especially helpful when utilizing indices for lists, or if you to do something for a specific number of times.