

# While

## Python Loops

Python has two primitive loop commands:

- `while` loops
- `for` loops

With the `while` loop we can execute a set of statements as long as a condition is true.

### Example

Print i as long as i is less than 6:

```
i = 1
while i < 6:
    print(i)
    i += 1
```

1  
2  
3  
4  
5

**Note:** remember to increment i, or else the loop will continue forever.

# The break Statement

```
i = 1
while i < 6:
    print(i)
    if (i == 3):
        break
    i += 1
```

```
1
2
3
```

# The continue Statement

With the **continue** statement we can stop the current iteration, and continue with the next:

```
i = 0
while i < 6:
    i += 1
    if i == 3:
        continue
    print(i)
```

**# Note that number 3 is missing in the result**

```
1
2
4
5
6
```

## Else with While

With the **else** statement we can run a block of code once when the condition no longer is true:

```
i = 1
while i < 6:
    print(i)
    i += 1
else:
    print("i is no longer less than 6")
```

```
1
2
3
4
5
i is no longer less than 6
```