

# Python While Loops

## Python Loops

Python has two primitive loop commands:

- `while` loops
- `for` loops

## The while Loop

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
```

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

The `while` loop requires relevant variables to be ready, in this example we need to define an indexing variable, `i`, which we set to 1.

# The break Statement

With the `break` statement we can stop the loop even if the while condition is true:

## Example

Exit the loop when i is 3:

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

# The continue Statement

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

## Example

Continue to the next iteration if i is 3:

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

# The else Statement

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

## Example

Print a message once the condition is false:

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