

'while' loop - advanced :

Stopping the 'while' loop with a 'break'

A 'while' loop will **stop** once it's condition will become 'false', that we already know....

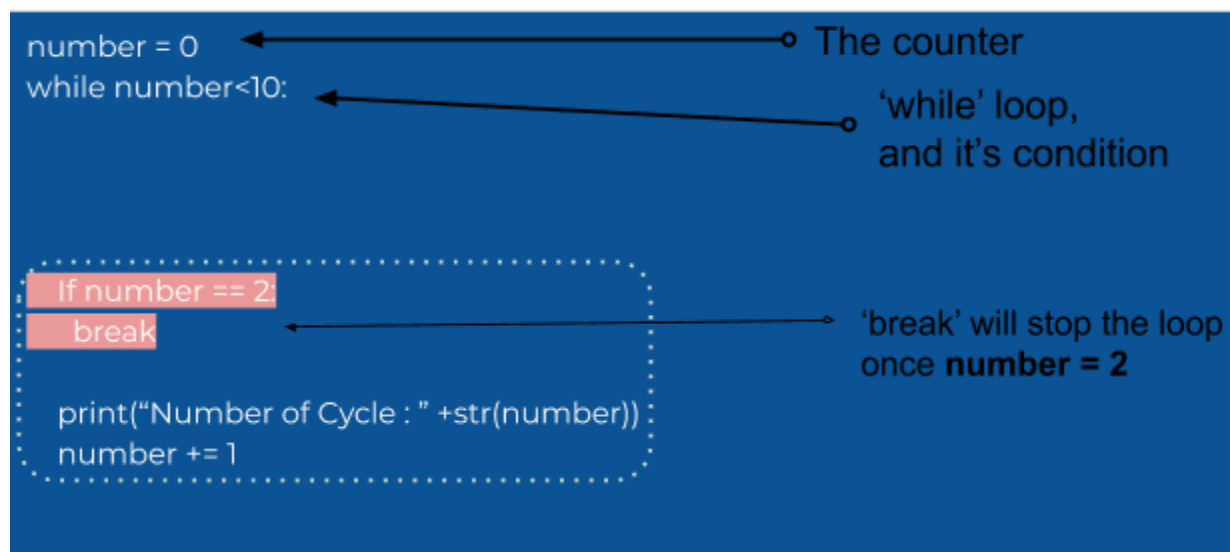
But what if there was an additional way to stop it ?

There is a way to stop a 'while' loop even when its condition is 'true', We can use our friend, the - **'break'**.

Once the code will reach the 'break' keyword, the code will exit the 'while'. Let's apply this on the previous **example** -

Code's Goal :

Onse the 'number' will grow to be '2', the code will exist in the 'while' loop.



Using 'while' with 'else' is a pretty logical thing to do

In the past we used 'if' with 'else', and it worked perfectly together. We can use 'else' together with 'while' loop as well.

We will tell the code - instead of exiting the 'while' loop once the condition is 'false', just go straight to the 'else'.

Let's see an example:

- ★ Add '+1' to the number while its smaller then 5
- ★ But once the condition is 'false', go to 'else', and multiply the number by 100 and print

```
number = 1
while number < 5:
    print(number)
    number += 1
else:
    number = number * 100
    print("number is no longer less than 5")
    print(number)
```

Output is:

```
1
2
3
4
number is no longer less than 5
500
```