Apart from function parameters there is another type of local variable which I haven't mentioned yet. Here is an example:

```
def count to five():
2
       number = 0
3
       while number <= 5:
4
           print(number)
5
           number = number + 1
6
7
       print('At the end of count to five, number is', number)
8
9
   number = 1234
10
   count to five()
   print('Back in the main code, number is', number)
```

```
0
1
2
3
4
5
At the end of count_to_five, number is 6
Back in the main code, number is 1234
```

There are two variables called 'number'.

Line 2 creates a local one, and sets it to 0.

Line 9 creates a global one, and set it to 1234.

When we run this code it takes the following steps:

- 1 (Line 1, plus lines 2-7) Define a new function, called 'count to five'.
- 2 (Line 9) Create a global variable called 'number' with a value of 1234.
- 3 (Line 10) Call the 'count to five' function.
- 4 (Line 2) Create a local variable called 'number' with a value of 0.
 - Note that we now have two variables called 'number', one global and one local.
- 5 (Line 4) Print the local 'number' variable. This is currently zero, so this prints a 0.

- 6 (Line 5) Increase the local 'number' variable by one. It is now 1.
- 7 (Line 4) Again, print the local 'number' variable. This is one, so this prints a 1.
- 8 (Lines 3 5) The 'while' loop is run four more times, until the test 'number \leq 5' fails. This test fails when number is 6, because '6 \leq 5' is not True.
 - Each time another number is printed. This prints out 2, 3, 4 and 5.
- 9 (Line 7) The local 'number' variable is now '6'. This prints the text "At the end of count to five, number is 6".
- 10 (After line 7) The function is done. The last line of the function (line 7) has been run. Python exits the count_to_five function. Any local variables created within this function are deleted automatically.
- 11 (Line 11) Python continues after the line where the function was called. It prints some text and the value of 'number'. We're no longer within a function, so we can only see the global variables. The local 'number' variable was deleted, as described in the previous step. So Python prints the global 'number' variable. This started with a value of 123

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