

BREAK STATEMENT AND CONTINUE STATEMENT

The `break` statement is used to **break** out of a loop statement i.e. stop the execution of a looping statement, even if the loop condition has not become `False` or the sequence of items has not been completely iterated over.

An important note is that if you **break** out of a `for` or `while` loop, any corresponding loop `else` block is **not** executed.

Example (save as `break.py`):

```
while True:  
  
    s = raw_input('Enter something : ')  
  
    if s == 'quit':  
  
        break  
  
    print 'Length of the string is', len(s)  
  
print 'Done'
```

Output:

```
$ python break.py
Enter something : Programming is fun
Length of the string is 18
Enter something : When the work is done
Length of the string is 21
Enter something : if you wanna make your work also fun:
Length of the string is 37
Enter something : use Python!
Length of the string is 11
Enter something : quit
Done
```

How It Works

In this program, we repeatedly take the user's input and print the length of each input each time. We are providing a special condition to stop the program by checking if the user input is 'quit'. We stop the program by **breaking** out of the loop and reach the end of the program.

The length of the input string can be found out using the built-in `len` function.

Remember that the `break` statement can be used with the `for` loop as well.

The `continue` Statement

The `continue` statement is used to tell Python to skip the rest of the statements in the current loop block and to **continue** to the next iteration of the loop.

Example (save as `continue.py`):

```
while True:

    s = raw_input('Enter something : ')

    if s == 'quit':

        break

    if len(s) < 3:

        print 'Too small'

        continue

    print 'Input is of sufficient length'

    # Do other kinds of processing here...
```

Output:

```
$ python continue.py
Enter something : a
Too small
Enter something : 12
Too small
Enter something : abc
Input is of sufficient length
Enter something : quit
```

How It Works

In this program, we accept input from the user, but we process the input string only if it is at least 3 characters long. So, we use the built-in `len` function to get the length and if the length is less than 3, we skip the rest of the statements in the block by using the `continue` statement. Otherwise, the rest of the statements in the loop are executed, doing any kind of processing we want to do here.

Note that the `continue` statement works with the `for` loop as well.

Source: <http://www.swaroopch.com/notes/python/>