

1811/2807/7001ICT

Programming Principles

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14 pass, break, continue

These three control statements are used in the bodies of other control statements to modify their normal behaviour.

14.1 Null operation – pass

The pass statement, for example:

`pass`

does nothing. Use it as a placeholder where a statement is required, but nothing is to be done.

For example, in a selection, sometimes one of the alternative situations requires no action, but to show it has been considered, leave it in with `pass` as the action.

```
if something needs doing:  
    do it  
else:  
    pass
```

14.2 break statements

The **break** statement terminates the execution of the loop body it occurs in, and the loop itself.

This is mostly useful in **for** loops that achieve their aim before iterating through their entire sequence.

A **break** statement should be placed in a selection inside the loop.

```
# file: str2.py  
# How many characters in a string come before  
# the first period.
```

```
s = "blah.blah.blah"
n = 0
for c in s:
    if c == '.':
        break
    else:
        n += 1
print(n)
```

```
$ python3 str2.py
4
$
```

14.3 **continue statements**

`continue` statements terminate the current execution of the loop body it occurs in, but not the loop.

So it skips to the next iteration.

Much less frequently used than `breaks`, they should also occur inside selections.

Section summary

This section covered:

- the `pass`, `break`, and `continue` statements.