generator

A function which returns an iterator. It looks like a normal function except that it contains yield statements for producing a series of values usable in a for-loop or that can be retrieved one at a time with the next() function. Each yield temporarily suspends processing, remembering the location execution state (including local variables and pending try-statements). When the generator resumes, it picks-up where it left-off (in contrast to functions which start fresh on every invocation).

generator expression

An expression that returns an iterator. It looks like a normal expression followed by a **for**expression defining a loop variable, range, and an optional **if** expression. The combined expression generates values for an enclosing function:

```
>>> sum(i*i for i in range(10))  # sum of squares 0, 1, 4, ... 81 >>> 285
```