

## 7.8. The `raise` statement

```
raise_stmt ::= "raise" [expression ["from" expression]]
```

If no expressions are present, `raise` re-raises the last exception that was active in the current scope. If no exception is active in the current scope, a `RuntimeError` exception is raised indicating that this is an error.

Otherwise, `raise` evaluates the first expression as the exception object. It must be either a subclass or an instance of `BaseException`. If it is a class, the exception instance will be obtained when needed by instantiating the class with no arguments.

The *type* of the exception is the exception instance's class, the *value* is the instance itself.

A traceback object is normally created automatically when an exception is raised and attached to it as the `__traceback__` attribute, which is writable. You can create an exception and set your own traceback in one step using the `with_traceback()` exception method (which returns the same exception instance, with its traceback set to its argument), like so:

```
raise Exception("foo occurred").with_traceback(tracebackobj)
```

The `from` clause is used for exception chaining: if given, the second *expression* must be another exception class or instance, which will then be attached to the raised exception as the `__cause__` attribute (which is writable). If the raised exception is not handled, both exceptions will be printed:

```
>>> try:
...     print(1 / 0)
... except Exception as exc:
...     raise RuntimeError("Something bad happened") from exc
... 
```

```
Traceback (most recent call last):
  File "<stdin>", line 2, in <module>
ZeroDivisionError: int division or modulo by zero
```

The above exception was the direct cause of the following exception:

```
Traceback (most recent call last):
  File "<stdin>", line 4, in <module>
RuntimeError: Something bad happened
```

A similar mechanism works implicitly if an exception is raised inside an exception handler or a `finally` clause: the previous exception is then attached as the new exception's `__context__` attribute:

```
>>> try:
...     print(1 / 0)
```

```
... except:
...     raise RuntimeError("Something bad happened")
...
Traceback (most recent call last):
  File "<stdin>", line 2, in <module>
ZeroDivisionError: int division or modulo by zero
```

During handling of the above exception, another exception occurred:

```
Traceback (most recent call last):
  File "<stdin>", line 4, in <module>
RuntimeError: Something bad happened
```

Additional information on exceptions can be found in section [Exceptions](#), and information about handling exceptions is in section [The try statement](#).