Multiple Context Managers



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```
with cm1() as a, cm2() as b:
BODY
```

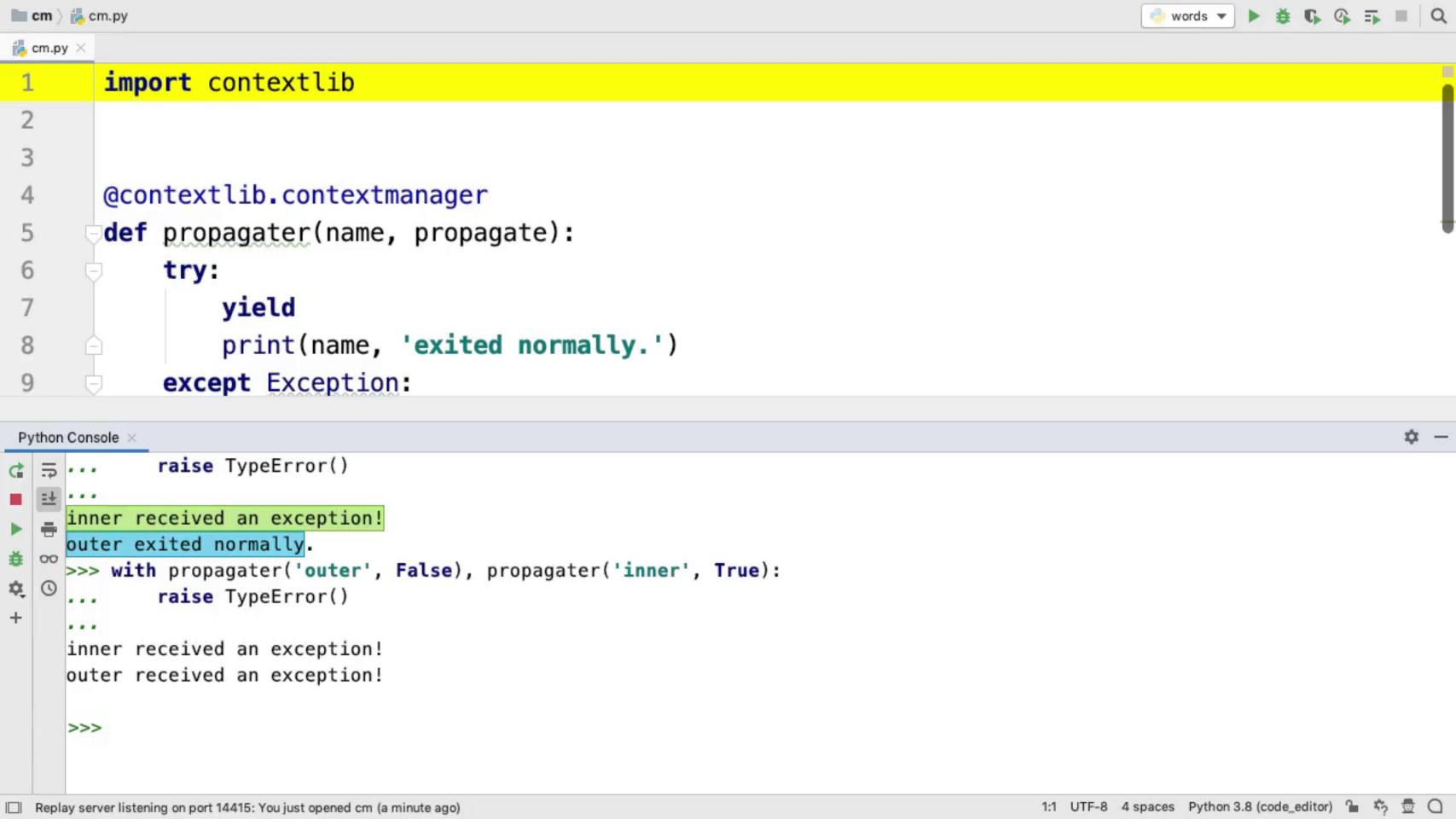
```
with cm1() as a:
    with cm2() as b:
    BODY
```





Any exception propagated from inner context managers will be seen by outer context managers

If an inner context manager swallows an exception, it won't be seen by outer context managers



Don't pass a sequence to a with-statement.

This is an easy mistake to make.

Sequences of Context Managers

```
pass
Traceback (most recent call last):
 File "<stdin>", line 1, in <module>
AttributeError: __enter__
>>> with nest_test('a'), nest_test('b'):
        pass
...
Entering a
Entering b
Exiting b
Exiting a
>>> with nest_test('a'), \
... nest_test('b'), \
    nest_test('c'):
       pass
. . .
Entering a
Entering b
Entering c
Exiting c
Exiting b
Exiting a
>>>
```

Summary



With-statements accept multiple comma-separated context managers

This is equivalent to nesting withstatements

Exception propagate from inner to outer context managers

Avoid passing lists or other sequences to with-statements