
Python Tutorial Documentation

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OVERVIEW

Course Python tutorial, PyCon JP 2011

Presenter ENDOH takanao

Intended audience Programmers who want a fast introduction to the basics of Python.

Tutorial format Frequently alternating presentation of concepts and exercise sets. Each pair of concepts and exercises ranges in length from 5 minutes on simple topics, to 20 minutes on more involved topics.

Requirements A laptop computer with Python 2.7 installed.

License MIT

Python

PythonPython

PythonPython

python-tutorial-ja.rtfld.org

Note:

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CHAPTER
FOUR

:

:

CHAPTER
FIVE

:

:

:

:

STR, REPR

:

repreval

:

reverse sort reversed sorted

:

CHAPTER
ELEVEN

:

Decorate, Sort, Undecorate (DSU) Idiom

Python

Python:

- ID
-
-
-
-
-

:

Python

CHAPTER
FOURTEEN

:

FOR

:

:

- `for`
- `iter()`
- `StopIteration` *next()*
- `iter(foo)`
 - `foo.__iter__()`
 - `foo.__getitem__` *IndexError* *StopIteration*

:

- `#!/usr/bin/env python 1`
- `.py`
- `.pyc`

play1.py:

```
#!/usr/bin/env python

x=3
y=2
print(x + y)
```

play2.py:

```
#!/usr/bin/env python

s = 'abc'
t = 'def'

def play():
    return s + t
```

play()

play3.py:

```
#!/usr/bin/env python

def play(args):
    pass          # Put code here.

def test_play():
    pass          # Put tests here.

if __name__ == '__main__':
    test_play() # This doesn't run on import.
```

:

play.py

:

Define a function `triple(n)` in a module `triple.py` such that `triple.triple(3)` returns 9. Import `triple` and try it out. Extend the plural function above to handle proper nouns (that start with a capital letter) that end in 'y', for example the correct plural of "Harry" is "Harrys".

list(f)

:
:
:

CHAPTER
TWENTY

Python :

- 1.
- 2.
3. (built-ins)

importdefdel : <http://docs.python.org/tutorial/classes.html#python-scopes-and-name-spaces>

-
- *ClassName()* *ClassName(parameters)*

point1.py:

```
class Point(object):
    """Example point class"""

    def __init__(self, x=0, y=0):
        # Note that self exists by now
        self.x, self.y = x, y

    def __repr__(self):
        return 'Point({0}.x, {0}.y)'.format(self)

    __str__ = __repr__

    def translate(self, deltax=None, deltay=None):
        """Translate the point"""
        if deltax:
            self.x += deltax
        if deltay:
            self.y += deltay
```

:

Write a class Employee that tracks first name, last name, age, and manager.

Review: Classes

- Class creates a new namespace and a new class object, and wires them for inheritance.
-
- If attribute lookup finds a method then a method object is returned. It handles sending self to the function.
-
-

CHAPTER
TWENTYTWO
