

1 EAFP

It's Easier to Ask Forgiveness then Permission

```
def quack_and_fly(thing):
    try:
        thing.quack()
        thing.fly()
    except AttributeError as e:
        print(e)
```

2 Python OOP

2.1

| | | |
|----------------|---|-------------------|
| class | | instance |
| variable | X | variable |
| selfsiz | | selfi |
| class.__dict__ | | instance.__dict__ |
| classname.var | | self.var |

2.2

`isinstance(x, y)` `issubclass(x, y)`

2.3 @classmethod instance metodlarında otomatik olarak ilk parametre instance olur. Bu decorator ile class gelir. def set_{raiseamt}(cls, amount):

`cls.raiseamt = amount`

2.4 @staticmethod

Sınıfla ilgili ancak instance ya da class referansına ihtiyaç duymayan metodlar.

(ÖRNEK)

3 Property Decorators

```
def decorator_function(original_function):
    def wrapper_function():
        print('Wrapper executed this before {}'.format(original_function.__name__))
        return original_function()
    return wrapper_function

@decorator_function
def display():
    print('display function ran')
```

Yukarıdaki decorator tanımlaması aşağıdaki gibi generik hale getirilebilir. Aşağıda anlamadığım bir nokta var.

```
def decorator_function(original_function):
    def wrapper_function(*args, **kwargs):
        print('Wrapper executed this before {}'.format(original_function.__name__))
        return original_function(*args, **kwargs)
    return wrapper_function

@decorator_function
def display():
    print('display function ran')
```



```
@property
def fullname(self):
```

```
        return '{} {}'.format(self.first, self.last)

@fullname.setter def fullname(self, name):
    first, last = name.split(' ')
    self.first = first self.last = last

@fullname.deleter def fullname(self, name):
    print('Delete name!')
    self.first = None self.last = None del emp1.fullname
```

4 Functools

5 Context Managers

Resides in contextlib module

5.1 with (resource)

5.2 ignored (exception)

5.3 lock (threading)

6 Magic Methods (dunder)

| Method | Explanation |
|---------------------------|-------------|
| <code>--init--</code> | |
| <code>--repr--</code> | |
| <code>--str--</code> | |
| <code>--add--</code> | |
| <code>--len--</code> | |
| <code>--iter--</code> | |
| <code>--next--</code> | |
| <code>--reversed--</code> | |
| <code>--getattr--</code> | |
| <code>--setattr--</code> | |
| <code>--delattr--</code> | |

vs

7 try/except

```
try:
    f = open('file.txt')
except FileNotFoundError as e:
    print(e)
except Exception as e:
    print(e)
else:
```

```
    print(f.read)
    f.close()
finally:
    print('Executing Finally...')
```

8 Collections

8.1 namedtuple

```
from collections import namedtuple
>>>Point = namedtuple('Point', ['x', 'y'], verbose=True)
>>>p = Point(11, y=22)
>>>p[0]+p[1]
33
>>>p.x + p.y
33
>>>x, y = p
>>>x + y
33
```

8.2 deque (double ended queue)

```
from collections import deque
d = deque('ghi')
for elem in d:
    print(elem.upper())
G
H
I
d.append('j')
d.appendleft('R')
```

- append/appendleft
- pop/popleft

8.3 chainMap

Best way to merge dictionary without altering source dictionaries
 from collections import ChainMap

| | | |
|---|--|--|
| EAFP It's Easier to Ask Forgiveness then Permission <pre> #+BEGIN_SRC python def quack_and_fly(thing): try: thing.quack() thing.fly() except AttributeError as e: print(e) #+END_SRC </pre> | | |
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