

Advanced Python for JPMC

TTPS4804

Instructor

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Configuring Visual Studio code

Some settings to make programming with Python easier

Auto-save

- Search for "auto save"
- Set to *after delay*

Launch folder

- Search for "execute in"
- Check box for **Python > Terminal: Execute in File Dir**

Minimap

- Search for "minimap enabled"
- Uncheck **Editor > Minimap: Enabled**

Editor font size

- Search for "editor font size"
- Set **Editor: Font Size** to desired size

Terminal font size

- Search for "terminal font size"
- Set **Terminal: Font Size** to desired size

Themes

- Got to **File > Preferences > Theme > Color Theme**
- Select new theme as desired

Decorator Syntax

```
@mydecorator  
def some_function():  
    pass
```

same as

```
some_function = mydecorator(some_function)
```

Implementation

```
def mydecorator(original_function):  
    @wraps(original_function)  
    def _(*args, **kwargs):  
        # add code here  
        result = original_function(*args, **kwargs)  
        return result  
    return _
```

Decorator with parameters

```
@mydecorator(param, ...)  
def some_function():  
    pass
```

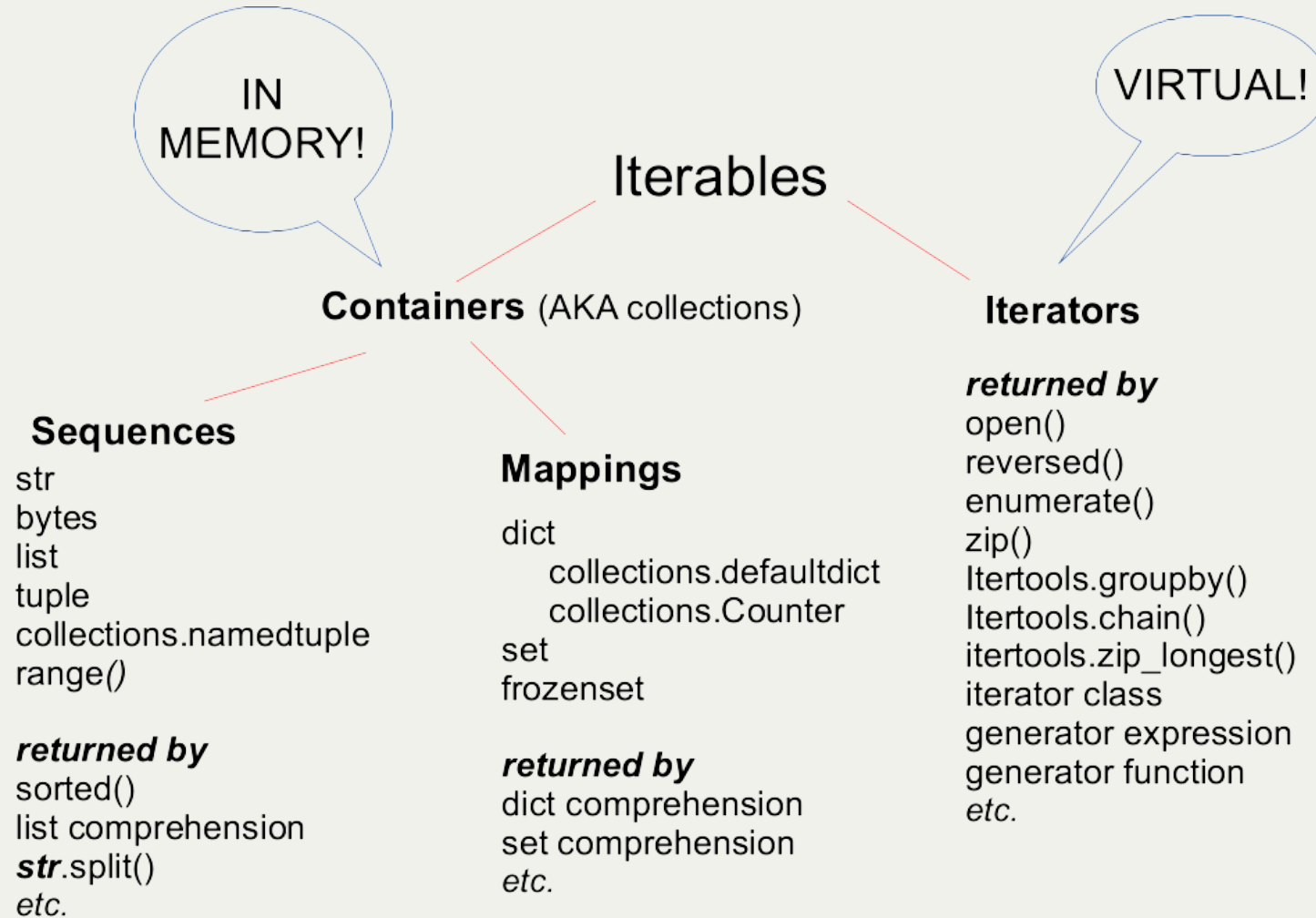
same as

```
some_function = mydecorator(param, ...)(some_function)
```

Implementation

```
def mydecorator(param, ...):  
    def inner_decorator(original_function):  
        @wraps(original_function)  
        def _(*args, **kwargs):  
            # add code here using decorator params  
            result = original_function(*args, **kwargs)  
            return result  
        return _  
    return inner_decorator
```

Iterables



Containers

- All elements in memory
- Can be indexed with []
- Have a length

Builtin containers

Sequences

`list`

`tuple`

`string`

`bytes`

`range`

Mapping types

`dict`

`set`

`frozenset`

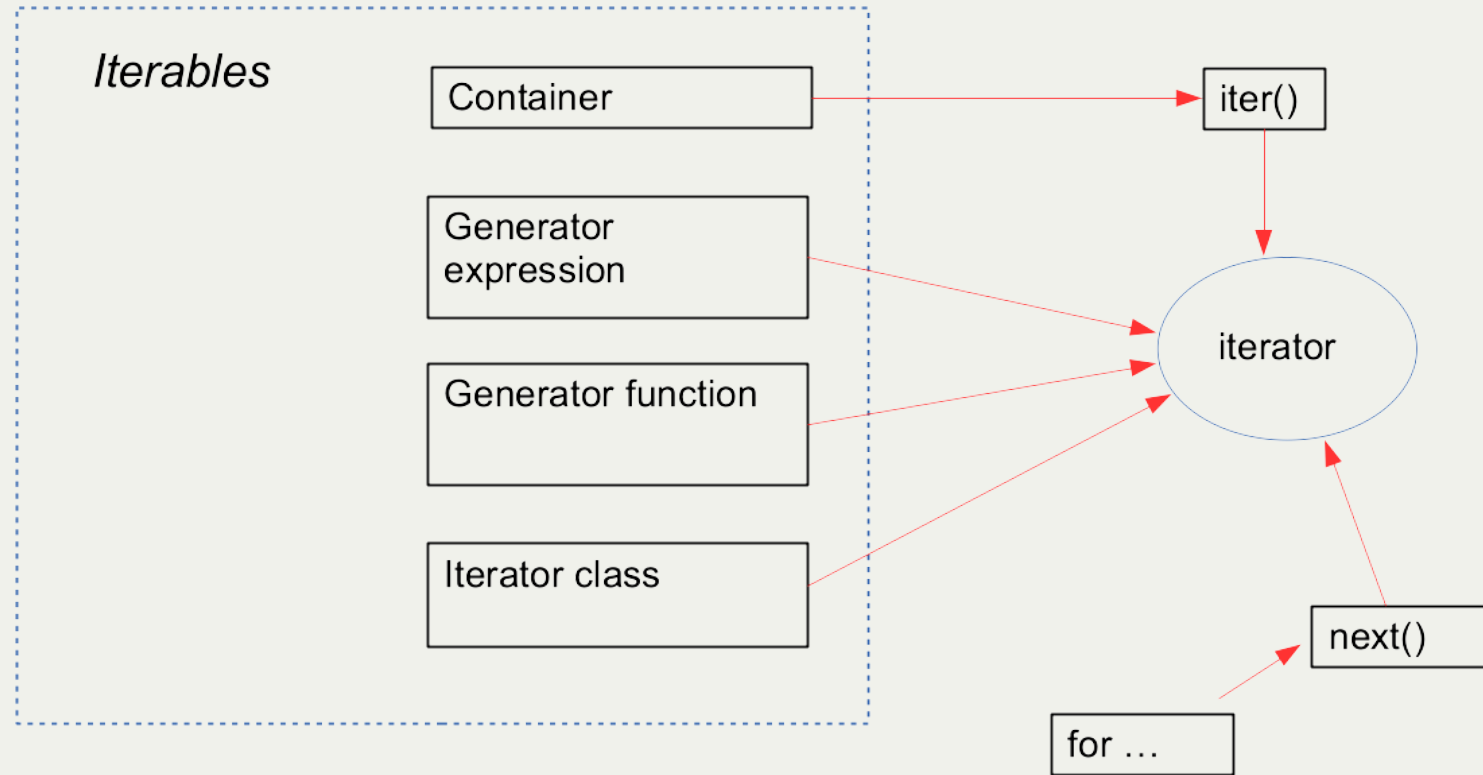
Iterators

- Virtual (no memory used for data)
- Lazy evaluation (JIT)
- Cannot be indexed with []
- Do not have a length
- One-time-use

Iterators returned by

- `open()`
- `enumerate()`
- `DICT.items()`
- `zip()`
- `reversed()`
- *generator expression or function*
- *iterator class*

Iterators



Concurrency

