

Introduction to Computer Programming

Week 6.1: Importing Python files



University of
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In-class Demos

Try it yourself**Example 1a:**

Create the file structure shown below within a new folder called `lecture_6` .

Add the content shown within each file.

```
lecture_6/  
├── __init__.py  
├── capitals.py  
└── main.py
```

`__init__.py`

```
# (empty file)
```

`capitals.py`

```
Japan = ('Japan', 'Tokyo')  
Germany = ('Germany', 'Berlin')
```

`main.py`

```
# (empty file)
```

Example 1b:

Within `main.py` , print the output below:

The capital of Japan is Tokyo

Solution: Example 1b

main.py

```
import capitals

print('The capital of', capitals.Japan[0], 'is', capitals.Japan[1])

# OR

print(f'The capital of {capitals.Japan[0]} is {capitals.Japan[1]}')
```

Try it yourself

Example 1c:

Within main.py , print the output below:

The capital of Germany begins with B

Example 1d: Can you make the code in main.py any more concise?

Solution: Example 1c

main.py

```
import capitals

print(f'The capital of {capitals.Germany[0]} begins with {capitals.Germany[1][0]}')
```

Solution: Example 1d

Changing the module name in the local namespace

main.py

```
import capitals as c

print(f'The capital of {c.Japan[0]} is {c.Japan[1]}')

print(f'The capital of {c.Germany[0]} begins with {c.Germany[1][0]}')
```

Solution: Example 1d

Importing *individual items* from a module

Whatever comes after `import` is added to the local namespace

main.py

```
from capitals import Japan, Germany

print(f'The capital of {Japan[0]} is {Japan[1]}')

print(f'The capital of {Germany[0]} begins with {Germany[1][0]}')
```

Solution: Example 1d

Importing *individual items* from a module and renaming

Whatever comes after `import` is added to the local namespace

`main.py`

```
from capitals import Japan as J, Germany as G

print(f'The capital of {J[0]} is {J[1]}')

print(f'The capital of {G[0]} begins with {G[1][0]}')
```

In []:

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