

Python : Import

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- Modules: File containing Python definitions and Statements
- We can import module definition from one file to another

import <module_name>

Example:

```
import math
import numpy
import random
```

- ❑ A module can contain variables
- ❑ A module can contain function
- ❑ To access the variables and functions use dot operator

module.variables
module.function

Example:

```
math.sin(30)
```

```
math.pi
```

```
random.randint(100)
```

- ❑ Further module can contain
 - ❑ Executable statements with Function definitions
 - ❑ Its own private symbol table : Global symbol for all functions of the module
- ❑ Module Search Path
 1. Current directory
 2. List of directories specified in PYTHONPATH

- When we specify ***import <module_name>***
 - You can access each of its function as
 - *module.function()*
- When you have modified a few functions in module
 - You should restart your interpreter
 - Alternatively, you can reload the module
 - E.g.: `import importlib`
 - `importlib.reload(module_name)`

- When a very large application is developed with multiple submodules, you can't import all submodules at one go.
- ***from <module_name> import ****
 - It does not import all submodules from a package
 - E.g: `from scipy import *` does not import `scipy.integrate`
 - Make sure, you have imported required packages properly
 - E.g: `from scipy.integrate import *`
 - `import scipy.integrate`

- ***from <module_name> import <name(s)>***
 - You can also integrate a few specific module
 - **E.g:** `from scipy.integrate import quadrature, trapz`

- ***from <module_name> import <name(s)> as <alt_name>***
 - You can import a module and given alternative name
 - E.g: `import numpy as np`
 - `import matplotlib as mpl`
 - `import matplotlib.pyplot as plt`

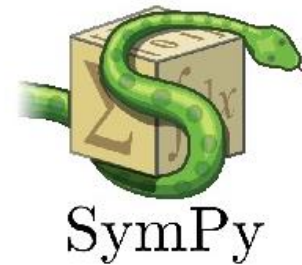
<https://realpython.com/python-modules-packages/#python-packages>



End of Python File Processing



IP[y]:
IPython



pandas
 $y_{it} = \beta' x_{it} + \mu_i + \epsilon_{it}$

