

(in Python) concept:

- Split your program into separate files.

Why?

- organization.
- collaboration.
- code re-use.

(in Python) "Module" :- file whose code is being re-used
"Script" :- the main file being executed.

Syntax

`import module.`

Note: code in `module` is executed first, before the code in the `script`.

to use something define in a module
`module . name`

Import individual names

`from module import name.`

- Executing Modules vs Executing Scripts

A file can check whether is being run as a module, or as a script.

by checking special variable `--name--`

Why?

- not to be inside the module

Why?

- put tests inside the module.
- program could have multiple entry points
- presupposes that you are developing a script from which code will be re-used.

- Where are the modules
 - in the same folder as script file
 - in a folder in the python system configuration.
- the "Python Standard Library"
a collection of modules pre-included in python.

<https://docs.python.org/3/library/index.html>

Very rich & complete

Still, there is some famous third party modules.

scipy numpy
pandas polars

matplotlib

pytorch

Django

PyGame.