



Introduction to Modules and Packages



Modules



Functions can be used to divide a program into smaller, modular parts

What can we do when a program grows large, with many functions?



Modules



Another way to divide a large program into smaller parts (modularization)

Group code related to similar tasks together into separate .py files, called modules

Example: merchandise ordering program, orders.py & inventory.py

Code in modules can be accessed by other files, and even other programs, via **import**



Packages



Collections of related modules in a folder structure

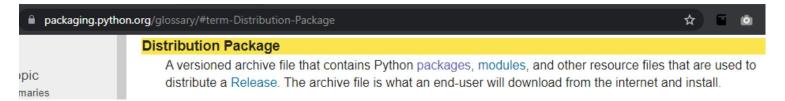
__init__.py is a special file that lets Python know this folder is a package

```
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|--- \longrightarrow my_pkg
|--- \longrightarrow \_init\_.py
|--- \longrightarrow module1.py
|--- \longrightarrow module2.py
```



Distribution packages





Python Package Index (PyPI): Public repository of Python distribution packages

Typically used with package installer pip

Similar purpose as NPM for JavaScript

Online git repositories such as GitHub also host open-source packages for Python and other languages

