Advanced Python
Subject: Modules and Packages in Python

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Modules and Packages in Python

Modular programming

- Modular programming refers to the process of breaking a large, unwieldy programming task into separate, smaller, more manageable subtasks.

- Individual modules can then be cobbled together like building blocks to create a larger application.

Several advantages of Modular programming

- Simplicity
- Maintainability
- Reusability
- Scoping

Modules and Packages in Python

Modular programming

- **Functions** and **classes** are basic constructs for modular programming in Python

- These functions and classes could be collected in python **modules** and **packages**.

What is Python module?

- A module is a script file could contains multiple functions, classes, and variables.

- Modules act as a pre-defined library in the code, which is accessible to both coder and user.

Modules and Packages in Python

More tips about python module

- There are actually three different ways to define a **module** in Python

    1. A module can be written in Python itself.

    2. A module can be written in **C/C++** and loaded dynamically at run-time

Modules and Packages in Python

Python packages

- Briefly, a Python package consists of multiple modules.

- A python package is a collection of such modules along with a __init__.py file.