CHAPTER 06

MODULE & LIBRARY

Module & Library dalam Python

- **Module**
  - satu file .py
  - ada code (variable, function, class) yang bisa dipakai (reusable)
- **Library**
  - satu paket berisi beberapa module
  - memiliki domain yang spesifik
  - dapat di-install ke dalam sistem
- Jika memungkinkan, pakailah library yang umum. Kenapa?
  - library yang *open-source* dan *well-maintained* sudah teruji kualitasnya.
  - mempercepat proses development

Tipe Library dalam Python

- **Python Standard Library**
  - bawaan Python: fungsi fundamental
  - contoh: os, sys, random, math, datetime, se
- **External Library**
  - library buatan engineer lain
  - repository resmi: https://pypi.org/
  - instalasi
    - `pip install library_name`

Library Terkait Cybersecurity

LIBRARY	USE CASE
scapy	Packet crafting, sniffing, network discovery
socket	Low-level networking (custom TCP clients, scanners)
requests	Web interaction, HTTP fuzzing, form brute force
nmap	Interact with Nmap from Python
paramiko	SSH automation, brute-force tools
shodan	Query Shodan search engine
pycryptodome	Encryption/decryption, crypto algorithms
beautifulsoup4	HTML parsing for web scraping
subprocess	Automating shell commands
pwntools	CTF scripting, exploitation
pylibnet	Packet injection (lower-level than Scapy)

Praktik

- ***SSH Brute Force with paramiko library***
  - Ingat DRIVE Framework
  - Pasang virtual env
  - Instalasi library
  - koding!