Python requests Module - Notes

# 🔹 Purpose

The requests module allows you to send HTTP/1.1 requests easily in Python. It supports methods like GET, POST, PUT, DELETE and is widely used for working with REST APIs, webhooks, and remote servers in DevOps and automation.

# 📦 Installation

Install with pip:

pip install requests

# 🔁 Common HTTP Methods

* requests.get(url) – Sends a GET request
* requests.post(url, data={}) – Sends a POST request
* requests.put(url, data={}) – Sends a PUT request
* requests.delete(url) – Sends a DELETE request
* requests.head(url) – Sends a HEAD request

# 📥 Response Handling

* r.status\_code – Returns the HTTP status code
* r.text – Returns the response body as a string
* r.json() – Parses the response body as JSON
* r.headers – Returns response headers
* r.ok – True if status code < 400

# 📤 Sending Data

* data={} – Send form-encoded data
* json={} – Send JSON data
* headers={} – Send custom headers
* params={} – Send query parameters

# 🔐 Auth & Timeout

* auth=('user', 'pass') – Basic authentication
* timeout=5 – Set request timeout (in seconds)

# 📄 Example Usage

* import requests
* response = requests.get('https://api.example.com/data')
* if response.ok:
* data = response.json()
* print(data)

# 🚀 Common Use Cases

* Monitor or query REST APIs
* Trigger webhooks or CI/CD events
* Authenticate and send data to cloud services
* Download files or call microservices