

YAML File Explanation

1. What is YAML?

- Stands for "YAML Ain't Markup Language"
- A human-readable data-serialization language
- Commonly used for configuration files (e.g., Kubernetes, Ansible, Docker Compose, CI/CD tools)

2. Basic Syntax Rules

- Uses indentation (spaces only - no tabs)
- Key-value pairs
- Lists with '-' indicator
- Comments start with '#'
- Case-sensitive

3. Data Types

- Scalars: strings, numbers, booleans
- Lists: - item1, - item2
- Dictionaries/Maps: key: value
- Nested structures: Combining maps and lists

4. Example 1: Simple Key-Value

name: Akshat

age: 30

married: true

5. Example 2: Lists

fruits:

- Apple
- Banana
- Orange

6. Example 3: Dictionary in a List

employees:

- name: Alice
 role: Developer
- name: Bob
 role: Tester

7. Example 4: List in a Dictionary

school:

- name: Greenwood
- classes:
 - Math
 - Science

8. Anchors & Aliases

defaults: &defaults

- timeout: 30
- retries: 5

production:

- <<: *defaults
- timeout: 60

9. Multiline Strings

description: |

This is a paragraph
with line breaks.

notes: >

This is a paragraph
with spaces only.

10. Common Use Cases

- Kubernetes manifests
- Docker Compose
- GitHub Actions workflows
- Ansible playbooks
- CI/CD pipeline configurations