

YAML QUICK REFERENCE

Scalars, sequences, mappings, anchors, multi-line

Syntax

Basic Rules

- Indentation** Spaces only (no tabs), consistent depth
- #** Comment (to end of line)
- Document start marker
- ...** Document end marker

Case sensitive Keys and values are case-sensitive

Minimal Example

```
---
name: Alice
age: 30
active: true
```

Scalars

Scalar Types

- hello** String (unquoted)
- "hello"** String (double-quoted, allows escapes)
- 'hello'** String (single-quoted, literal)
- 42 / 3.14** Number (integer / float)
- true / false** Boolean
- null / ~** Null value
- 2026-03-26** Date (ISO 8601)

Quoting Rules

plain: no quotes needed
special: "colons and hash # need quotes"
escapes: "line\nnewline"
literal: 'no \n escaping here'

Sequences

Block Sequence

```
fruits:
- apple
- banana
- cherry
```

Flow Sequence (Inline)

```
colors: [red, green, blue]
matrix: [[1, 2], [3, 4]]
```

Sequence of Objects

```
users:
- name: Alice
  role: admin
- name: Bob
  role: user
```

Mappings

Block Mapping

```
server:
host: localhost
port: 8080
debug: false
```

Flow Mapping (Inline)

```
point: {x: 10, y: 20}
```

Complex Keys

```
? [first, second]
: "compound key value"
```

Anchors & Aliases

Define & Reuse

```
defaults: &defaults
timeout: 30
retries: 3
production:
<<: *defaults
timeout: 60
```

Reference

- &name** Define an anchor
- *name** Reference (alias) an anchor
- <<** Merge key — merge mapping into current

Multi-line Strings

Block Scalars

- | (literal)** Preserves newlines exactly
- > (folded)** Folds newlines into spaces
- |- (keep)** Literal, keep trailing newlines
- |- (strip)** Literal, strip trailing newlines
- >| (fold+strip)** Folded, strip trailing newlines

Literal Block

```
script: |
echo "line one"
echo "line two"
```

Folded Block

```
description: >
This long text will be
folded into a single line
with spaces.
```

Tags

Type Tags

- !!str 42** Force value to string "42"
- !!int "42"** Force value to integer 42
- !!float 1** Force value to float 1.0
- !!bool "true"** Force value to boolean
- !!null ""** Force value to null
- !!binary** Base64-encoded binary data

Tag Example

```
port: !!str 8080
enabled: !!bool "yes"
version: !!float 3
```

Common Patterns

Docker Compose

```
services:
web:
image: nginx:alpine
ports: ["80:80"]
environment:
NODE_ENV: production
```

GitHub Actions

```
on: [push, pull_request]
jobs:
test:
runs-on: ubuntu-latest
steps:
- uses: actions/checkout@v4
```

Tips

- yamllint** Lint YAML for syntax and style
- yq** Command-line YAML processor (like jq)
- Avoid Noxway** NO is boolean false — quote country codes
- Avoid !!python** Never load untrusted YAML with unsafe loaders