

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: "colon:" and hash # need quotes"
escape: "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 Norway	NO is boolean false — quote country codes
Avoid !!python	Never load untrusted YAML with unsafe loaders