

# YAML

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## YAML

YAML is a data serialization language that is often used for writing configuration files. It is a light-weight, human-readable data-representation language. The extensions in YAML are .yaml or .yml.

- YAML = Yet Another Markup Language. (old full form)
- YAML = YAML Ain't Markup Language (new full form)  
*(a recursive acronym)*  
which emphasizes that YAML is for data not for documents.
- In YAML, you can only store data, and not commands.

The most common data types used in YAML are:

- (i) **Numbers**
- (ii) **Strings**
- (iii) **Null Values**
- (iv) **Boolean**
- (v) **Date and timestamps**
- (vi) **Sequences**
- (vii) **Nested Values**

Ques Where is YAML files used?

YAML files are used in

- Configuration files → Docker, Kubernetes, etc.
- logs, cache, etc.

## # BENEFITS Of YAML

- Simple & easy to read
- It has a nice & strict syntax.
- As easily convertible to JSON, XML.

- Most languages use YAML.
  - More powerful when representing complex data.
  - Parsers, etc. Various tools available.
  - Parsing is easy.  
Parsing means reading the data

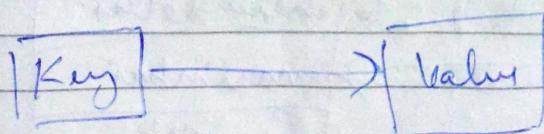
## # Types Of DATA we Can Save In YAML File

(1) KEY VALUE PAIRS = DATA TYPES

ey

"apple" : "I am a red fruit"  
key value

15 : " this is Duran's Roll no. 4  
Key      Value



YAML (or can say)

Date: / /  
Page No.

## (ii) LIST - DATATYPES

Eg:

# lists  $\Rightarrow$  comment

- apple
  - mango
  - banana
  - Apple
- there are two different things as YAML is case sensitive

use  $\rightarrow$  to represent lists

## (iii) Block Style DATATYPE

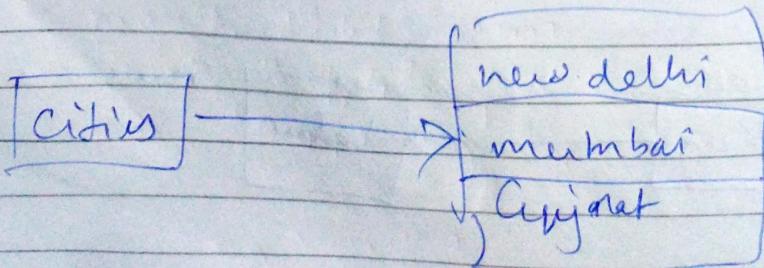
Cities :

<space> - new delhi

<space> - mumbai

<space> - gujrat

In YAML we use spaces and not Tabs and indentation is ~~very~~ extremely important.



## # DIFFERENTIATE - Q/w DOCUMENTS

If there are multiple documents/Data types in a YAML file, we can differentiate between them

using ---

Eg.

"apple": "I am a red fruit"  
1: "this is Duran's 1st no."

# lists

- apple
- mango
- banana
- Apple

---

Cities :

- <space> - new delhi
- 4 - mumbai
- 4 - gujrat

... → to end the document

use ---

iv) Scalar Type : Storing Data in Single Lines

In this you can store data in a single line

Eg:

Cities : [new delhi, mumbai, gujarat]

for key value pairs

Eg:

{ mango : "yellow fruit", age : 36 }

## # DATATYPES

ii) String Variables

There are 3 ways we can represent strings in YAML.

Eg

myself: Mohd Suran

fruit: "apple"

job: 'Devops Eng.'

String Variables

## String in string in multiple lines

Eg:

```
bio: |
hey my name is Mohd Irfan
I am a very nice dude.
```

## Write a single line in multiple lines

for g. if the line is too long

```
g. message: >
this will
all be
in one line.
```

## # SPECIFYING DATATYPE IN YAML

zero: !!int 0

To specify the datatype use !!datatype.

positiveNum: !!int 45

negativeNum: !!int -45

binaryNum: !!int 0b1001

octalNum: !!int 0(54)

hexa: !!int 0x45

commValue: !!int +540,000 (to store 540,000)

\* for floating point Number

marks! !!float 56.89

infinity !!float inf

not a num: .num

\* for boolean use !!bool

\* for string use !!str

\* for null value

e.g. surname! !null Null

or

NULL

or

null

or

~

\* for date and time use !!timestamp

e.g. india time! !!timestamp 2001-12-15T02:59:43.10+05:30

date	time	time zone
2001-12-15	02:59:43.10	+05:30

## # ADVANCED DATATYPES

### (i) SEQUENCE DATATYPE

Eg:

Student: !! seq

<seq> - marks

" - name

" - roll no.

Or

Student: [marks, name, roll no.]

### (ii) SPARSE SEQUENCE DATATYPE

When some of the keys of the sequence will be empty then it is known as sparse sequence.

Eg.

Sparse seq!

<seq> - key

" - how

" -

" - Null

" - sub

(iii)

Nested Sequence DataTypes

If you want to create a nested sequence with items and sub-items, you can do so by placing a single space before each item in the sub-items.

Ex:

- Cat

- Dog

- Goldfish

- Python

- Lion

- Tiger

(iv)

MAPPING DataTypes

Key Value pairs are called maps.

for maps use !map to specify

(v)

Nested Mapping

If means map within a map

eg

name: Mohd Imran

role:

age: 26

job: student

### (vii) PAIRS DATATYPE

In this keys may have duplicate  
values

!! pairs to specify

eg.

pair example: !! pairs

- job: student

- job: teacher

\* !! set will allow you to have unique  
values

(viii)

### DICTIONARY DATATYPE

!! omap is used for this

If is used to represent entire sequence  
as a value.

eg

people: !!omap

- Kunal:

name: Pranav

age: 26

height: 175

- Rachel

name: Rachel OP

age: 50

height: 450

# REUSING PROPERTIES WITH ANCHORS

This is what to copy and where to copy.

↳ Copy  $\Rightarrow$  & Anchors↳ paste  $\Rightarrow$  << ! \* Anchors >>

Eg.

liking: &amp; likes

fav fruit: mango

dislikes: grapes

Person 1:

name: Parham

<<: \*likes

to overrule something.

Person 2:

name! Suhail

<<! \* like

dislikes: Berries

is related to mastiff St. B

六

10

6/11

2

actions we may take in the situation  
which would now first allow his  
ministers to act independently but  
without violating Davis's right to be  
informed of our progress in the  
various actions he has

• (negative) ~~is not~~ wif ~~not~~ ~~not~~  
• (negative) ~~is not~~ wif ~~not~~ ~~not~~

(Учебник) Урок 1

Minerid (min) spricht mit  
einer weib. mittelaltr. Frau, die er nicht  
kennt. Sie ist sehr höflich und hört