YAML

ⓐ Introduction
ⓐ Syntax
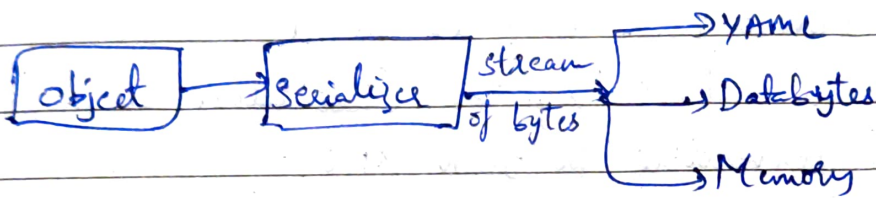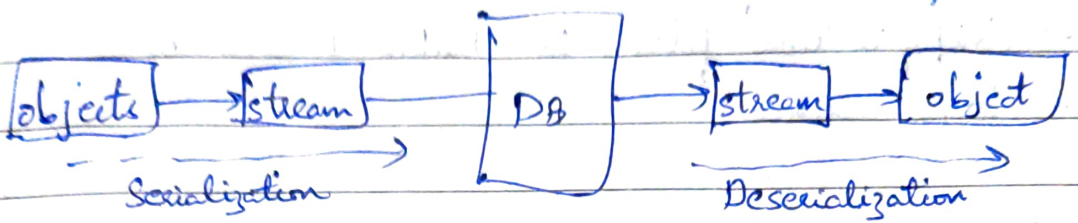ⓐ Properties / Datatypes
ⓐ YAML tools.

YAML:-

→ Previously it is called "Yet Another Markup Lang".
→ Now, "YAML Ain't Markup Language".
→ It is basically a data format used to exchange data.
→ It is similar to XML/JSON datatypes.
→ It is simple human readable language that is used to represent data.
→ In YAML, use can store only date and not commands.

Data-Serialization:-

→ Storing of data in files.

→ For examples, if we have stored in memory of a like object of particular students. You want to share this info to android app/web app/ML model.
→ These needs some sort of way to have particular data to share in one single format everywhere.
→ This can be done by serialization and deserialization.

→ Serialization is a basically a process of converting data objects that is present in some into a complex data structure into a stream of byte or storage that can be used to transfer this data on likes your physical devices.

objects → stream → DB → stream → object

Serialization ——→   Deserialization ——→

object → Serializer → stream of bytes → YAML
→ Databytes
→ Memory

Object is combination of code + data.

Another definition:-
Serialization is basically a process of converting the data object which is a combination of code and data into series of bytes that saves the state of this object in a form that is easily transmittable.

'Data Serialization languages:- *YAML, JSON and XML.

. Why full form YAML changed?
→ Markup Languages used to store only documents but in YAML, you can store the objects data along with documents.

Use of YAML files?
→ Configuration files. Ex:- Docker, Kubernetes etc
→ logs, cache.

Benefits of YAML files?
→ It is simple and easy to read.
→ It has a strict syntax. (Identation is important)
→ Easily convertible to JSON, XML.
→ Most languages use it.
→ More powerful when representing complex data.
→ Use of various tools like parsers etc.
→ Parsing is easy.

ⓐ YAML is case sensitive.
ⓑ In YAML, use space for identation not tabs.
ⓒ No multi line comments.
ⓓ If a file has different datatype like key-value, lists or block then to consider all as 3 different documents use "---" between them.
ⓔ To end document use "..."

Block Style.

```
┌─────────┐     ┌────────────┐
│ cities  │─────│    no      │
└─────────┘     │ 1 Mumbai   │
                │ 2 Ranchi   │
                └────────────┘
```