Databases Types

(i) key value database

Ex - Redis, Memcached, kubernetes

keys   value

239221   →   { "name": "Mike", "age": 29 }

239623   →   42

• used for caching • very fast • message queue -
(limited in schemas).
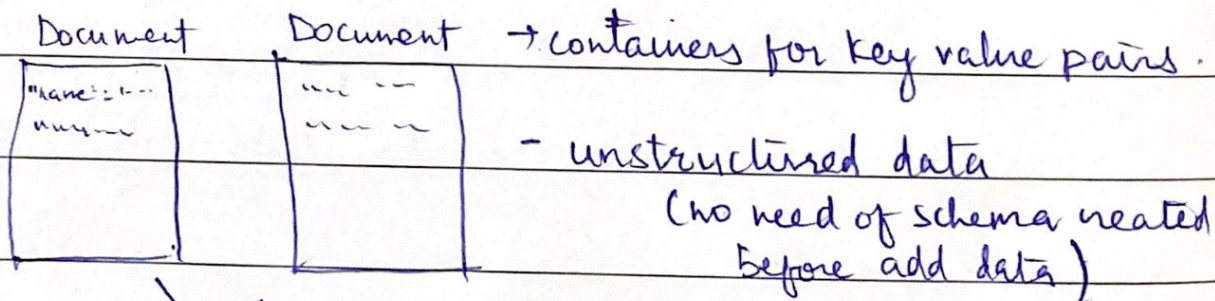
• Wide Column

- value is divided into multiple columns.

Exs- Apache,   → scalable, simpler db comp to relational
db.
Best for :- Timeseries, IOT records, History records.

• Document Databases.

- Mongo DB, DynamoDB, CouchDB

Document	Document	→ containers for key value pairs.
"name :-...	... ...	
......	....	- unstructured data
		(no need of schema created
		before add data)

can be group in (collection)

organised in → relational hierarchy

• faster to read • Slower writes • easy to get started.

- Usecases - Mobile apps, game apps, most apps.

- Relational Databases

  - MySQL   - PostgreSQL

- to store structured data

- Schema and data types needs to created first.

                (SQL)

- data is organised in tables.

- ACID → Atomicity, Consistency, Isolation, Durability.

- Graph Databases

- Direct connect Entities → Nodes & Edges
                                          ↓
- Best for: Graphs, Patterns.   Relationships

- Search Databases

- Search Databases thr. massive data entries.

- Full text search in efficient & fast way.

Ex:- Elastic Search, Solr → document oriented.

- Creates index of words.