Mongo-DB

(1)
1. document-Oriented database.
2. high Performance, high availibilty, easy Scalability.
3. Collection and document-

(2)

	SQL	No-SQL.
(1) data model.	Row and colums.	(1) key-value (2) document- (3) column family. (4) graph based db.
(2) Data structure	Pre-define schema	Dynamic schema.
(3) Scalability	Vertical	horizontal
(4) Query language	SQL	according to No-SQL DB
(5) Degine Property	ACID ↓ transaction.	BASE / CAP

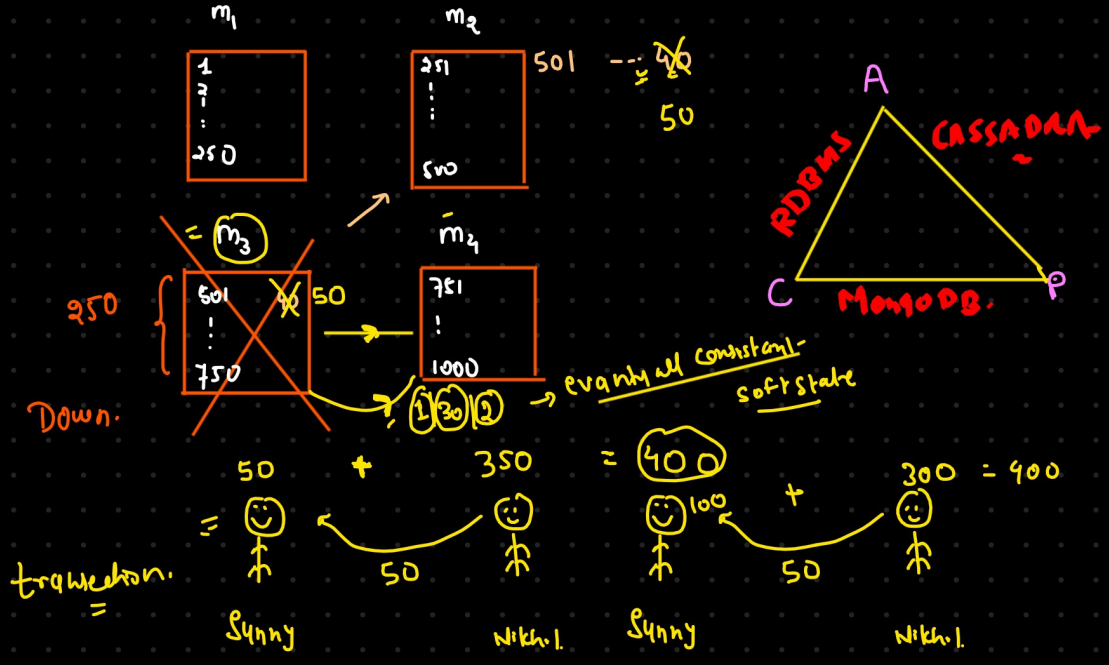
(3) CAP → Consistancy, availibility, Partition

CP or AP or CA.

CAP

Replication and duplication

E.ID	E.Name	Age.
1	Deepak	30
2	Rajbir	25
3	sunny	21
4	Venkash.	35
5	Shashank	32
6	-	-
!	-	-
1000	-	-



BASE = { Basic availability. Soft state. Eventually Consistant. }

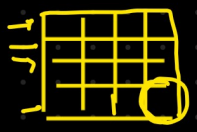
NoSql

SQL → ACID

(4) HBASE | CASSANDRA | MongoDB.

1. NO-SQL
2. It does not follow ACID | BASE
3. Open-Source.
4. Cross-platform

SQL
RXC.



(1) Key : value.
(2) Column family
(3) document-based
(4) Graph based DB

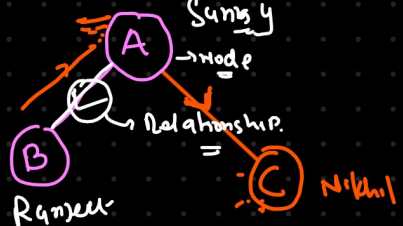
(53)

(1) Key → Numeric.
Value → can be anything.
(Hashing)

(2) Column family.
① Hbase
② cassandra

(3) document based DB.
JSON | BSON.
Can be anything
{ key: value =

(4) Graph based.



Instagram

(5) Which DB is best | better according to req.

Key:value, Json, Graph

1. Data model
2. availability.
3. Write | Read Speed.
4. Work load
5. APIs | language | query support. (mongoDB) (cassandra)
6. Index query. (mongoDB)
7. Data aggregation.

6 = HBASE | CASSANDRA | MongoDB

1. Description.
2. Data model.
3. Query language.
4. Performance.
5. Security
6. Replication methods. (Availability)
7. Application / market - matrix.

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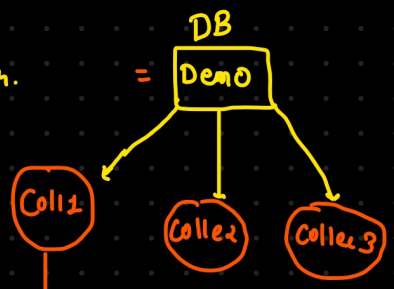
1. Database → Physical container for collection.
2. Collection → group of documents
3. document → Json view of data.
   Or
   key : value.



My-SQL = RDBMS

DB → Demo → Emp table

Emp id	Emp name	Age
1	Sunny	25
2	Ravi	30
3	Supraj	28

Mongo DB.

DB → Demo → Emp Collection

```
= { { empid : 1
    empname: Sunny
    age : 25 }
    Addrss: ... }

  { empid : 2
    empname: Ravi
    age : 28 }

  { empid : 3
    empname: Supraj.
    age : 30 } }
```

Dynamic