**Mongo DB**

We can store data in the form of key-value pairs ie JSON.

Value can be number, string , Boolean, object, array of objects.

SID(PK), SName, age, SkillSet

1, John, 23, C,CC++,Java

Student

PK

1 John 21

SkillSet

PK

100 Java

101 C

102 C++

StudentSkilSet

FK FK

SrNo Sid SkillSetId

111 1 100

222 1 101

333 1 102

**In Mongo DB inside one collection we can store more than one document and each document value can be number, string, array values.**

**Please connect mongo db**

**use mearn\_2025\_batch;**

**db.Students.insertMany([**

**{\_id:1,sname:"John",age:21,skillset:["Java","C","C++"]},**

**{\_id:2,sname:"Neena",age:22,skillset:["Python","C","C++"]},**

**{\_id:3,sname:"Raj",age:23,skillset:["HTML","CSS","JavaScript"]},**

**{\_id:4,sname:"Steven",age:24,skillset:["Angular","ReactJS"]}**

**]);**

**db.Students.find();**

**search document details with array value conditions.**

**db.Students.find({skillset:"C"});**

**Adding new value to array fields.**

**$push operator we need to use.**

**db.Students.updateMany({sname:"John"},{$push:{skillset:"React JS"}});**

**$addToSet operator we need to use. It add only it not exits.**

**db.Students.updateMany({sname:"John"},{$addToSet:{skillset:"React JS"}});**

**remove particular skillset**

**db.Students.updateMany({sname:"John"},{$pull:{skillset:"React JS"}});**

**Mongo Db Relationship**

Mongo DB we can achieve relationship using 2 ways.

1. Embedded style: we are storing all information in single collection.
2. Linking style: we are storing all information more than one collection.

Trainer and Student relationship in RDBMS

Trainer (TID🡪PK),tname,etc

Student(SID—PK),SName,age,tid(FK) etc

Tech(TID🡪pk), TechName etc

TrainerTech () this table maintain the relationship

Linking Style

**Aggregate function**

Mongo DB support Aggregate function like group by with multi row function ie sum, max,min, avg and count in RDBMS etc.

Aggregate function are the part of aggregate pipeline which is used to process transform, and analyse the data.

Using these function we can achieve

1. Filter, group and transform the data.
2. Perform like a operation as sum, max, min, count and avg etc.
3. Like a group by function in RDBMS database.