Assignment No. B5

- Title : Implement 5 Basic query using mongoDB.

- Problem Statment : Design and Implement any 5 queries using mongoDB.

- Objective : To,
  1) Understand the concept of MongoDB.
  2) Understand the concept of mongoDB on two tier.
  3) Understand the basic commands of MongoDB.

- Outcome : We will be able to,
  1) Implement the commands on two tier.
  2) Implement the database in mongoDB

- S/W & H/W Requirements :
  mongoDB, PC with 64-bit OS, 8GB RAM.

- Theory :

  MongoDB — It is a cross-platform, document oriented database that provides high performance, high availability and easy scalability. Mongo DB works on the concept of collection and document. A single MongoDB server typically has multiple databases.

  Collection — It is a group of mongoDB documents. It is equivalent of an RDBMS table. A collection exists within a single database. Collections do not enforce a schema. Documents within a collection

can have different fields.

Document — It is a set of key-value pairs. Documents have dynamic schema. Dynamic schema means that documents in the same collection donot need to have the same set of fields or structure and common fields in a collection's documents may hold different types of data.

Advantages of mongoDB over RDBMS.

1) Schema less : MongoDB is document database in which one collection holds different documents. Number of fields, content and size of the documat can differ from one document to another.

2) Structure of a single object is clear.
3) No complex joins
4) Deep query — ability : mongoDB supports dynamic queries on documats using a documat-based query language that's alnearly as powerful as SQL.
5) Tuning
6) MongoDB is easy to scale.
7) Conversion (mapping of application objects to database objects not needed.
8) Uses internal memory for storing the (windowed) working set, enabling faster access of data.

MongoDB Create Database

The use command
MongoDB use DATABASE_NAME is used to create
database. The command will create a new database.
If it doesn't exist, otherwise it will return the
existing database.

Syntax:
    use DATABASE_NAME

Example:
    If you want to create a database with name
<mydb>, then use DATABASE statement wold be
as follows:
        > use mydb
swithed to db mydb.
To check your currently selected database use the
command db
    > db
    > mydb

Result: All the test cases yidded the result "PASS".

Conclusion: Thus, we specifically implemented the 5
        queries with the required schema.