EXPERIMENT - 2

AIM: Installation and Configuration of MongoDB and perform following operations.

THEORY: MongoDB is a cross-platform, document oriented database that provides, high performance, high availability, and easy scalability. MongoDB works on concept of collection and document.

The following table shows the relationship of RDBMS terminology with MongoDB.

RDBMS	MongoDB
Database	Database
Table	Collection
Tuple/Row	Document
column	Field
Table Join	Embedded Documents
Primary Key	Primary Key (Default key _id provided by mongodb itself)

Any relational database has a typical schema design that shows number of tables and the relationship between these tables. While in MongoDB, there is no concept of relationship.

Advantages ofMongoDB over RDBMS

- **Schema less** − MongoDB is a document database in which one collection holds different documents. Number of fields, content and size of the document can differ from one document to another.
- Structure of a single object is clear.

- No complex joins.
- Deep query-ability. MongoDB supports dynamic queries on documents using a document-based query language that's nearly as powerful as SQL.
- Tuning.
- **Ease of scale-out** − MongoDB is easy to scale.
- Conversion/mapping of application objects to database objects not needed.
- Uses internal memory for storing the (windowed) working set, enabling faster access of data.

Steps for Installation of Mongodb in Ubuntu

Step #1: Setup a the Package Database.

First we'll import the MongoDB public key used by the package management system:

```
sudo apt-key adv --keyserver hkp://keyserver.ubuntu.com:80 --recv 7F0CEB10
```

Then we'll create a list file for MongoDB:

```
echo 'deb http://downloads-distro.mongodb.org/repo/ubuntu-upstart dist 10gen' | sudo tee /etc/apt/sources.list.d/mongodb.list
```

Now reload the package database:

```
sudo apt-get update
```

Step #2: Install Latest Stable Version MongoDB

At this point, installing MongoDB is as simple as running just one command:

```
sudo apt-get install -y mongodb-org
```

Step #3: Get MongoDB Running

Start-Up MongoDB

```
sudo service mongod start
```

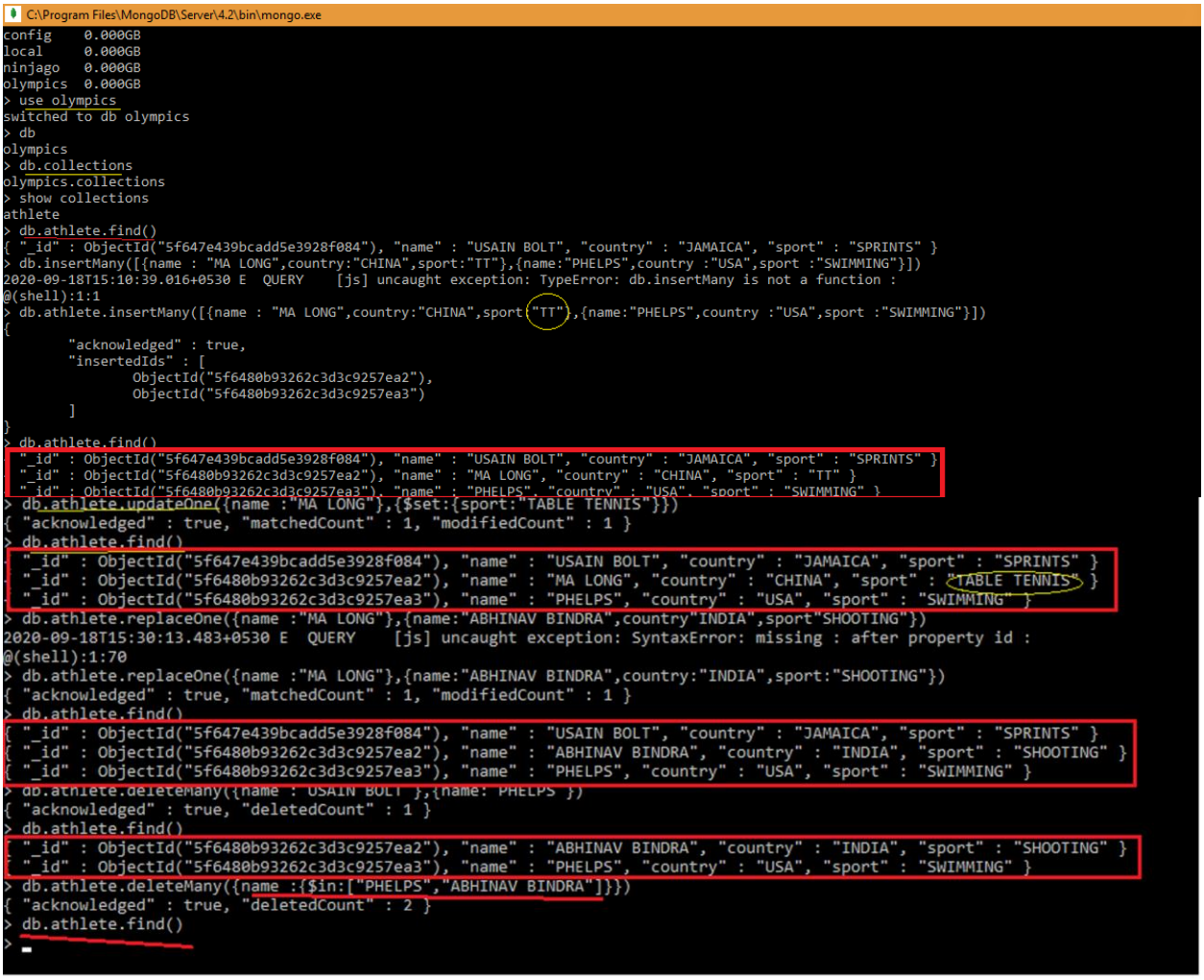
Check MongoDB Service Status

```
sudo service mongod status
```

Enter the MongoDB Command Line

```
mongo
```

OUTPUT:



CONCLUSION: Installation of Mongodb is done and execution of basic commands performed.