Assignment No : B-01
Database Management Lab

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Mongodb Installation and Basic CRUD Operations

Starting the mongodb server

```
[shyam@localhost ~]$ su
Password:
[root@localhost shyam]# systemctl start mysqld
[root@localhost shyam]# clear
#[3;J
[root@localhost shyam]# systemctl start mongod
[root@localhost shyam]# systemctl enable mongod
[root@localhost shyam]# systemctl status mongod
● mongod.service - High-performance, schema-free document-oriented database
   Loaded: loaded (/usr/lib/systemd/system/mongod.service; enabled)
   Active: active (running) since Tue 2017-10-24 11:55:13 IST; 1h 15min ago
 Main PID: 1075 (mongod)
   CGroup: /system.slice/mongod.service
           └─1075 /usr/bin/mongod --quiet -f /etc/mongodb.conf run

Oct 24 11:54:46 localhost.localdomain mongod[846]: about to fork child proces...
Oct 24 11:54:46 localhost.localdomain mongod[846]: forked process: 1075
Oct 24 11:54:47 localhost.localdomain mongod[846]: all output going to: /var/...
Oct 24 11:54:47 localhost.localdomain mongod[846]: log file [/var/log/mongodb...
Hint: Some lines were ellipsized, use -l to show in full.
[root@localhost shyam]# mongo
MongoDB shell version: 2.4.14
connecting to: test
>
```

Display the databases

```
> show dbs
Department    0.203125GB
Shyam 0.203125GB
local    0.078125GB
```

Switch to database

```
> use Shyam
switched to db Shyam
```

Create Collection

```
> db.createCollection("Students")
{ "ok" : 1 }
```

Insert Operations

```
> db.Students.insert({_id:02,stud_name:"Shyam",class:"TEB",marks:75,result:"Pass"})
> db.Students.insert({_id:01,stud_name:"Abhishek",class:"TEB",marks:75,result:"Pass"})
> db.Students.insert({_id:03,stud_name:"Sanjay",class:"TEB",marks:65,result:"Pass"})
> db.Students.insert({_id:04,stud_name:"Vinay",class:"TEB",marks:65,result:"Pass"})
> db.Students.insert({_id:05,stud_name:"Mayur",class:"TEB",marks:85,result:"Pass"})
> db.Students.insert({_id:06,stud_name:"Dhiraj",class:"TEB",marks:85,result:"Pass"})
```

Read Operations

> db.Students.find()

```
{ "_id" : 2, "stud_name" : "Shyam", "class" : "TEB", "marks" : 75, "result" : "Pass" }
{ "_id" : 1, "stud_name" : "Abhishek", "class" : "TEB", "marks" : 75, "result" : "Pass" }
{ "_id" : 3, "stud_name" : "Sanjay", "class" : "TEB", "marks" : 65, "result" : "Pass" }
{ "_id" : 4, "stud_name" : "Vinay", "class" : "TEB", "marks" : 65, "result" : "Pass" }
{ "_id" : 5, "stud_name" : "Mayur", "class" : "TEB", "marks" : 85, "result" : "Pass" }
{ "_id" : 6, "stud_name" : "Dhiraj", "class" : "TEB", "marks" : 85, "result" : "Pass" }
```

> db.Students.find().pretty()

```
{
        "_id" : 2,
        "stud_name" : "Shyam",
        "class" : "TEB",
        "marks" : 75,
        "result" : "Pass"
}
{
        "_id" : 1,
        "stud_name" : "Abhishek",
        "class" : "TEB",
        "marks" : 75,
        "result" : "Pass"
}
{
        "_id" : 3,
        "stud_name" : "Sanjay",
        "class" : "TEB",
        "marks" : 65,
        "result" : "Pass"
}
{
        "_id" : 4,
        "stud_name" : "Vinay",
        "class" : "TEB",
        "marks" : 65,
        "result" : "Pass"
}
```

```
{
        "_id" : 5,
        "stud_name" : "Mayur",
        "class" : "TEB",
        "marks" : 85,
        "result" : "Pass"
}
{
        "_id" : 6,
        "stud_name" : "Dhiraj",
        "class" : "TEB",
        "marks" : 85,
        "result" : "Pass"
}
```

Remove all document

```
> db.Students.remove()
```

Update document

```
> db.Students.find().pretty()
{
        "_id" : 1,
        "stud_name" : "Abhishek",
        "class" : "TEB",
        "marks" : 75,
        "result" : "Pass"
}
{
        "_id" : 6,
        "stud_name" : "Dhiraj",
        "class" : "TEB",
        "marks" : 85,
        "result" : "Pass"
}
{
        "_id" : 5,
        "stud_name" : "Mayur",
        "class" : "TEB",
        "marks" : 85,
        "result" : "Pass"
}
{
        "_id" : 4,
        "stud_name" : "Vinay",
        "class" : "TEB",
        "marks" : 65,
        "result" : "Pass"
}
```

```
{
        "_id" : 3,
        "stud_name" : "Aarati",
        "class" : "TEB",
        "marks" : 65,
        "result" : "Pass"
}
```