

05.04.2022

Creating database

Use sonal

> db
sonal

```
sdooq@admin1-HP-230-G4-R1-Business-PC:~$ mongo
MongoDB shell version v5.0.1
connecting to: mongodb://127.0.0.1:27017/?compressors=disabled&gssapiServiceName=mongodb
Implicit session: session { "id" : UUID("3991b727-a53e-4439-93ab-9d71cb342f18") }
MongoDB server version: 5.0.1

*****
Warning: the "mongo" shell has been superseded by "mongosh",
which delivers improved usability and compatibility. The "mongo" shell has been deprecated and will be removed in
an upcoming release.
We recommend you begin using "mongosh".
For installation instructions, see
https://docs.mongodb.com/mongodb-shell/install/
*****

The server generated these startup warnings when booting:
  2022-04-05T08:55:39.121+05:30: Using the XFS filesystem is strongly recommended with the WiredTiger storage engine. See http://dochub.
mongodb.org/core/production-filesystem
  2022-04-05T08:55:42.206+05:30: Access control is not enabled for the database. Read and write access to data and configuration is unre
stricted
  ...
  ...
  Enable MongoDB's free cloud-based monitoring service, which will then receive and display
metrics about your deployment (disk utilization, CPU, operation statistics, etc).

The monitoring data will be available on a MongoDB website with a unique URL accessible to you
and anyone you share the URL with. MongoDB may use this information to make product
improvements and to suggest MongoDB products and deployment options to you.

To enable free monitoring, run the following command: db.enableFreeMonitoring()
To permanently disable this reminder, run the following command: db.disableFreeMonitoring()
  ...
  ...
```

creating collections and fields

inserting one document

```
> db.student.insertOne({ studentno : 1, name:" sonal",city:"kolar"})
{
  "acknowledged" : true,
  "insertedId" : ObjectId("624bb89536acd308ea6aa0ba")
}
> show collections
student
> db.student.find().pretty()
{
  "_id" : ObjectId("624bb89536acd308ea6aa0ba"),
  "studentno" : 1,
  "name" : " sonal",
  "city" : "kolar"
}
```

```

> show dbs
1nt19is174  0.000GB
admin        0.000GB
config       0.000GB
lakshana     0.000GB
local        0.000GB
nmit         0.000GB
sample       0.000GB
sneha2       0.000GB
> use sonal
switched to db sonal
> db
sonal
> db.student.insertOne({ studentno : 1, name:" sonal",city:"kolar"})
{
  "acknowledged" : true,
  "insertedId" : ObjectId("624bb89536acd308ea6aa0ba")
}
> show collections
student
> db.student.find().pretty()
{
  "_id" : ObjectId("624bb89536acd308ea6aa0ba"),
  "studentno" : 1,
  "name" : " sonal",
  "city" : "kolar"
}

```

inserting many documents

```

> db.department.insertMany([{deptno:1,deptname: " ISE",location:
"first"},{deptno:2,deptname:"CSE",location:"second"},{deptno:3,deptname:"ECE",location:"third"}])
{
  "acknowledged" : true,
  "insertedIds" : [
    ObjectId("624bbb3036acd308ea6aa0bb"),
    ObjectId("624bbb3036acd308ea6aa0bc"),
    ObjectId("624bbb3036acd308ea6aa0bd")
  ]
}

```

```

> db.department.insertMany([{deptno:1,deptname: " ISE",location: "first"},{deptno:2,deptname:"CSE",location:"second"},{deptno:3,deptname:"ECE",location:"third"}])
{
  "acknowledged" : true,
  "insertedIds" : [
    ObjectId("624bbb3036acd308ea6aa0bb"),
    ObjectId("624bbb3036acd308ea6aa0bc"),
    ObjectId("624bbb3036acd308ea6aa0bd")
  ]
}

```

show collections

```

> show collections
department
student

```

describing collections

```

> db.department.find().pretty()
{
  "_id" : ObjectId("624bbb3036acd308ea6aa0bb"),

```

```

"deptno" : 1,
"deptname" : " ISE",
"location" : "first"
}
{
"_id" : ObjectId("624bbb3036acd308ea6aa0bc"),
"deptno" : 2,
"deptname" : "CSE",
"location" : "second"
}
{
"_id" : ObjectId("624bbb3036acd308ea6aa0bd"),
"deptno" : 3,
"deptname" : "ECE",
"location" : "third"
}
> db.student.find().pretty()
{
"_id" : ObjectId("624bb89536acd308ea6aa0ba"),
"studentno" : 1,
"name" : " sonal",
"city" : "kolar"
}

```

```

> show collections
department
student
> db.department.find().pretty()
{
  "_id" : ObjectId("624bbb3036acd308ea6aa0bb"),
  "deptno" : 1,
  "deptname" : " ISE",
  "location" : "first"
}
{
  "_id" : ObjectId("624bbb3036acd308ea6aa0bc"),
  "deptno" : 2,
  "deptname" : "CSE",
  "location" : "second"
}
{
  "_id" : ObjectId("624bbb3036acd308ea6aa0bd"),
  "deptno" : 3,
  "deptname" : "ECE",
  "location" : "third"
}
> db.student.find().pretty()
{
  "_id" : ObjectId("624bb89536acd308ea6aa0ba"),
  "studentno" : 1,
  "name" : " sonal",
  "city" : "kolar"
}

```

Update operations

updating one value using Set

```
> db.department.updateOne({deptno:1},{ $set:{deptname:"EEE"}})
{ "acknowledged" : true, "matchedCount" : 1, "modifiedCount" : 1 }
> db.department.find().pretty()
{
  "_id" : ObjectId("624bbb3036acd308ea6aa0bb"),
  "deptno" : 1,
  "deptname" : "EEE",
  "location" : "first"
}
{
  "_id" : ObjectId("624bbb3036acd308ea6aa0bc"),
  "deptno" : 2,
  "deptname" : "CSE",
  "location" : "second"
}
{
  "_id" : ObjectId("624bbb3036acd308ea6aa0bd"),
  "deptno" : 3,
  "deptname" : "ECE",
  "location" : "third"
}
```

```
> db.department.updateOne({deptno:1},{ $set:{deptname:"EEE"}})
{ "acknowledged" : true, "matchedCount" : 1, "modifiedCount" : 1 }
> db.department.find().pretty()
{
  "_id" : ObjectId("624bbb3036acd308ea6aa0bb"),
  "deptno" : 1,
  "deptname" : "EEE",
  "location" : "first"
}
{
  "_id" : ObjectId("624bbb3036acd308ea6aa0bc"),
  "deptno" : 2,
  "deptname" : "CSE",
  "location" : "second"
}
{
  "_id" : ObjectId("624bbb3036acd308ea6aa0bd"),
  "deptno" : 3,
  "deptname" : "ECE",
  "location" : "third"
}
```

Updating many values

```
> db.department.updateMany({}, { $set:{location:"first"}})
{ "acknowledged" : true, "matchedCount" : 3, "modifiedCount" : 2 }
> db.department.find().pretty()
{
```

```

    "_id" : ObjectId("624bbb3036acd308ea6aa0bb"),
    "deptno" : 1,
    "deptname" : "EEE",
    "location" : "first"
  }
  {
    "_id" : ObjectId("624bbb3036acd308ea6aa0bc"),
    "deptno" : 2,
    "deptname" : "CSE",
    "location" : "first"
  }
  {
    "_id" : ObjectId("624bbb3036acd308ea6aa0bd"),
    "deptno" : 3,
    "deptname" : "ECE",
    "location" : "first"
  }
}

```

```

> db.department.updateMany({},{$set:{location:"first"}})
{ "acknowledged" : true, "matchedCount" : 3, "modifiedCount" : 2 }
> db.department.find().pretty()
{
  "_id" : ObjectId("624bbb3036acd308ea6aa0bb"),
  "deptno" : 1,
  "deptname" : "EEE",
  "location" : "first"
}
{
  "_id" : ObjectId("624bbb3036acd308ea6aa0bc"),
  "deptno" : 2,
  "deptname" : "CSE",
  "location" : "first"
}
{
  "_id" : ObjectId("624bbb3036acd308ea6aa0bd"),
  "deptno" : 3,
  "deptname" : "ECE",
  "location" : "first"
}

```

Unset operation

```

> db.department.updateOne({deptno:1},{$unset:{deptname:""}})
{ "acknowledged" : true, "matchedCount" : 1, "modifiedCount" : 1 }
> db.department.find().pretty()
{
  "_id" : ObjectId("624bbb3036acd308ea6aa0bb"),
  "deptno" : 1,
  "location" : "first"
}
{
  "_id" : ObjectId("624bbb3036acd308ea6aa0bc"),
  "deptno" : 2,

```

```

"deptname" : "CSE",
"location" : "first"
}
{
  "_id" : ObjectId("624bbb3036acd308ea6aa0bd"),
  "deptno" : 3,
  "deptname" : "ECE",
  "location" : "first"
}
> db.department.updateOne({deptno:1},{ $unset:{deptname:"ISE"}})
{ "acknowledged" : true, "matchedCount" : 1, "modifiedCount" : 0 }
> db.department.find().pretty()
{
  "_id" : ObjectId("624bbb3036acd308ea6aa0bb"),
  "deptno" : 1,
  "location" : "first"
}
{
  "_id" : ObjectId("624bbb3036acd308ea6aa0bc"),
  "deptno" : 2,
  "deptname" : "CSE",
  "location" : "first"
}
{
  "_id" : ObjectId("624bbb3036acd308ea6aa0bd"),
  "deptno" : 3,
  "deptname" : "ECE",
  "location" : "first"
}

```

```

> db.department.updateOne({deptno:1},{ $unset:{deptname:""}})
{ "acknowledged" : true, "matchedCount" : 1, "modifiedCount" : 1 }
> db.department.find().pretty()
{
  "_id" : ObjectId("624bbb3036acd308ea6aa0bb"),
  "deptno" : 1,
  "location" : "first"
}
{
  "_id" : ObjectId("624bbb3036acd308ea6aa0bc"),
  "deptno" : 2,
  "deptname" : "CSE",
  "location" : "first"
}
{
  "_id" : ObjectId("624bbb3036acd308ea6aa0bd"),
  "deptno" : 3,
  "deptname" : "ECE",
  "location" : "first"
}

```

Delete operations

```
> db.department.deleteOne({deptno:3})
{ "acknowledged" : true, "deletedCount" : 1 }
> db.department.find().pretty()
{
  "_id" : ObjectId("624bbb3036acd308ea6aa0bb"),
  "deptno" : 1,
  "location" : "first"
}
{
  "_id" : ObjectId("624bbb3036acd308ea6aa0bc"),
  "deptno" : 2,
  "deptname" : "CSE",
  "location" : "first"}
```

```
> db.department.deleteOne({deptno:3})
{ "acknowledged" : true, "deletedCount" : 1 }
> db.department.find().pretty()
{
  "_id" : ObjectId("624bbb3036acd308ea6aa0bb"),
  "deptno" : 1,
  "location" : "first"
}
{
  "_id" : ObjectId("624bbb3036acd308ea6aa0bc"),
  "deptno" : 2,
  "deptname" : "CSE",
  "location" : "first"
}
```