SESSION-1

Microsoft Windows [Version 10.0.22631.3085]

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C:\Users\karthik>mongosh

Current Mongosh Log ID: 65c46c9304b9ade2c90cdb6c

Connecting to: mongodb://127.0.0.1:27017/?directConnection=true&serverSelectionTimeoutMS=2000&appName=mongosh+2.1.3

Using MongoDB: 7.0.5

Using Mongosh: 2.1.3

For mongosh info see: https://docs.mongodb.com/mongodb-shell/

  The server generated these startup warnings when booting

  2024-02-08T11:22:37.753+05:30: Access control is not enabled for the database. Read and write access to data and configuration is unrestricted

------

test> show dbs

admin   40.00 KiB

```
config  84.00 KiB

local   72.00 KiB

test> use facultydb

switched to db facultydb

facultydb> show dbs

admin   40.00 KiB

config  84.00 KiB

local   72.00 KiB

facultydb> db.createCollection

db.createCollection


facultydb> db.createCollection("faculty")

{ ok: 1 }

facultydb> show dbs

admin      40.00 KiB

config     72.00 KiB

facultydb  8.00 KiB

local      72.00 KiB

facultydb> show collections

faculty

facultydb> db

facultydb

facultydb> db.faculty.drop()

true

facultydb> show collections
```

```
facultydb> db.dropDatabase()

{ ok: 1, dropped: 'facultydb' }

facultydb> show dbs

admin   40.00 KiB

config  96.00 KiB

local   72.00 KiB

facultydb> use admin

switched to db admin

admin> db

admin

admin> use facultydb

switched to db facultydb

facultydb> db.create

db.createUser          db.createCollection      db.createEncryptedCollection  db.createView
db.createRole


facultydb> db.createCollection("faculty")

{ ok: 1 }

facultydb> show collections

faculty

facultydb> //insert document


facultydb> db.faculty.insert({fid:4654,fname:"SURYA"})

DeprecationWarning: Collection.insert() is deprecated. Use insertOne, insertMany, or bulkWrite.

{
```

```
  acknowledged: true,

  insertedIds: { '0': ObjectId('65c4711504b9ade2c90cdb6d') }

}

facultydb> db.faculty.find().pretty()

[

 {

   _id: ObjectId('65c4711504b9ade2c90cdb6d'),

   fid: 4654,

   fname: 'SURYA'

 }

]

facultydb> db.faculty.find()

[

 {

   _id: ObjectId('65c4711504b9ade2c90cdb6d'),

   fid: 4654,

   fname: 'SURYA'

 }

]

facultydb> db.faculty.insertOne({fid:4414,fname:"HARI"})

{

  acknowledged: true,

  insertedId: ObjectId('65c4729404b9ade2c90cdb6e')

}

facultydb> db.faculty.insertMany([{fid:5000},{fid:1234,fname:"KLU"}])
```

```
{

  acknowledged: true,

  insertedIds: {

   '0': ObjectId('65c4734304b9ade2c90cdb6f'),

   '1': ObjectId('65c4734304b9ade2c90cdb70')

  }

}

facultydb> db.faculty.find()

[

 {

   _id: ObjectId('65c4711504b9ade2c90cdb6d'),

   fid: 4654,

   fname: 'SURYA'

 },

 {

   _id: ObjectId('65c4729404b9ade2c90cdb6e'),

   fid: 4414,

   fname: 'HARI'

 },

 { _id: ObjectId('65c4734304b9ade2c90cdb6f'), fid: 5000 },

 {

   _id: ObjectId('65c4734304b9ade2c90cdb70'),

   fid: 1234,

   fname: 'KLU'

 }
```

```
]
facultydb> db.faculty.find().size()

4

facultydb> db.faculty.countDocuments()

4

facultydb> db.faculty.find().limit(2)

[
  {
    _id: ObjectId('65c4711504b9ade2c90cdb6d'),

    fid: 4654,

    fname: 'SURYA'

  },
  {
    _id: ObjectId('65c4729404b9ade2c90cdb6e'),

    fid: 4414,

    fname: 'HARI'

  }
]
facultydb> db.faculty.find().sort({fid:1}) //asc

[
  {
    _id: ObjectId('65c4734304b9ade2c90cdb70'),

    fid: 1234,

    fname: 'KLU'

  },
```

```
  {

    _id: ObjectId('65c4729404b9ade2c90cdb6e'),

     fid: 4414,

     fname: 'HARI'

  },

  {

    _id: ObjectId('65c4711504b9ade2c90cdb6d'),

     fid: 4654,

     fname: 'SURYA'

  },

  { _id: ObjectId('65c4734304b9ade2c90cdb6f'), fid: 5000 }

]

facultydb> db.faculty.find().sort({fid:-1}) //dsc

[

  { _id: ObjectId('65c4734304b9ade2c90cdb6f'), fid: 5000 },

  {

    _id: ObjectId('65c4711504b9ade2c90cdb6d'),

     fid: 4654,

     fname: 'SURYA'

  },

  {

    _id: ObjectId('65c4729404b9ade2c90cdb6e'),

     fid: 4414,

     fname: 'HARI'

  },
```

```
 {
    _id: ObjectId('65c4734304b9ade2c90cdb70'),
    fid: 1234,
    fname: 'KLU'
 }
]
facultydb> db.faculty.find().sort()
[
 {
    _id: ObjectId('65c4711504b9ade2c90cdb6d'),
    fid: 4654,
    fname: 'SURYA'
 },
 {
    _id: ObjectId('65c4729404b9ade2c90cdb6e'),
    fid: 4414,
    fname: 'HARI'
 },
 { _id: ObjectId('65c4734304b9ade2c90cdb6f'), fid: 5000 },
 {
    _id: ObjectId('65c4734304b9ade2c90cdb70'),
    fid: 1234,
    fname: 'KLU'
 }
]
```

```
facultydb> db.faculty.find({fid:1234})

[
  {
    _id: ObjectId('65c4734304b9ade2c90cdb70'),
    fid: 1234,
    fname: 'KLU'
  }
]
facultydb> db.faculty.updateOne({fid:1234},{$set:{fname:"KLEF"}})

{
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 1,
  upsertedCount: 0
}
facultydb> db.faculty.find().limit(1)

[
  {
    _id: ObjectId('65c4711504b9ade2c90cdb6d'),
    fid: 4654,
    fname: 'SURYA'
  }
]
facultydb> db.faculty.find().limit(2)
```

```
[
  {
    _id: ObjectId('65c4711504b9ade2c90cdb6d'),
    fid: 4654,
    fname: 'SURYA'
  },
  {
    _id: ObjectId('65c4729404b9ade2c90cdb6e'),
    fid: 4414,
    fname: 'HARI'
  }
]
facultydb> db.faculty.find().limit(3)
[
  {
    _id: ObjectId('65c4711504b9ade2c90cdb6d'),
    fid: 4654,
    fname: 'SURYA'
  },
  {
    _id: ObjectId('65c4729404b9ade2c90cdb6e'),
    fid: 4414,
    fname: 'HARI'
  },
  { _id: ObjectId('65c4734304b9ade2c90cdb6f'), fid: 5000 }
```

```
]
facultydb> db.faculty.find().limit(4)
[
  {
    _id: ObjectId('65c4711504b9ade2c90cdb6d'),
    fid: 4654,
    fname: 'SURYA'
  },
  {
    _id: ObjectId('65c4729404b9ade2c90cdb6e'),
    fid: 4414,
    fname: 'HARI'
  },
  { _id: ObjectId('65c4734304b9ade2c90cdb6f'), fid: 5000 },
  {
    _id: ObjectId('65c4734304b9ade2c90cdb70'),
    fid: 1234,
    fname: 'KLEF'
  }
]
facultydb> db.faculty.find({fid:5000})
[ { _id: ObjectId('65c4734304b9ade2c90cdb6f'), fid: 5000 } ]
facultydb> db.faculty.updateOne({fid:5000},{$set:{fname:"Harshitha",dept:"CSE"}})
{
  acknowledged: true,
```

```
  insertedId: null,

  matchedCount: 1,

  modifiedCount: 1,

  upsertedCount: 0

}
```

facultydb> db.faculty.find({fid:5000})

```
[

 {

  _id: ObjectId('65c4734304b9ade2c90cdb6f'),

  fid: 5000,

  dept: 'CSE',

  fname: 'Harshitha'

 }

]
```

facultydb> db.faculty.countDocuments()

4

facultydb> db.faculty.insertOne({fid:1764,fname:"Sanjana",dept:"CSE"})

```
{

  acknowledged: true,

  insertedId: ObjectId('65c47b1c04b9ade2c90cdb71')

}
```

facultydb> db.faculty.findOne({fid:1234})

{ _id: ObjectId('65c4734304b9ade2c90cdb70'), fid: 1234, fname: 'KLEF' }

facultydb> db.faculty.findOne({fid:1234,fname:"KLEF"})

{ _id: ObjectId('65c4734304b9ade2c90cdb70'), fid: 1234, fname: 'KLEF' }

```
facultydb> db.faculty.findOne({fid:1234,fname:"VIT"})

null

facultydb> db.faculty.findOne({dept:"CSE"})

{

  _id: ObjectId('65c4734304b9ade2c90cdb6f'),

  fid: 5000,

  dept: 'CSE',

  fname: 'Harshitha'

}

facultydb> db.faculty.find({dept:"CSE"})

[

 {

  _id: ObjectId('65c4734304b9ade2c90cdb6f'),

  fid: 5000,

  dept: 'CSE',

  fname: 'Harshitha'

 },

 {

  _id: ObjectId('65c47b1c04b9ade2c90cdb71'),

  fid: 1764,

  fname: 'Sanjana',

  dept: 'CSE'

 }

]

facultydb> db.faculty.find({fid:1234})
```

```
[
  {
    _id: ObjectId('65c4734304b9ade2c90cdb70'),
    fid: 1234,
    fname: 'KLEF'
  }
]
facultydb> db.faculty.deleteOne({fid:1234})
{ acknowledged: true, deletedCount: 1 }
facultydb> db.faculty.find().size()
4
facultydb> db.faculty.countDocuments()
4
facultydb> db.faculty.find({dept:"CSE"})
[
  {
    _id: ObjectId('65c4734304b9ade2c90cdb6f'),
    fid: 5000,
    dept: 'CSE',
    fname: 'Harshitha'
  },
  {
    _id: ObjectId('65c47b1c04b9ade2c90cdb71'),
    fid: 1764,
    fname: 'Sanjana',
```

dept: 'CSE'

  }

]

facultydb> db.faculty.deleteMany({dept:"CSE"})

{ acknowledged: true, deletedCount: 2 }

facultydb>

SESSION-2

Microsoft Windows [Version 10.0.22631.3085]

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C:\Users\karthik>mongosh

Current Mongosh Log ID: 65c5a21626d8cc44ae96528e

Connecting to: mongodb://127.0.0.1:27017/?directConnection=true&serverSelectionTimeoutMS=2000&appName=mongosh+2.1.3

Using MongoDB: 7.0.5

Using Mongosh: 2.1.3

For mongosh info see: https://docs.mongodb.com/mongodb-shell/

The server generated these startup warnings when booting

2024-02-08T19:10:07.780+05:30: Access control is not enabled for the database. Read and write access to data and configuration is unrestricted

------

```
test> show dbs

admin      40.00 KiB

config     72.00 KiB

facultydb  72.00 KiB

local      72.00 KiB

test> use facultydb

switched to db facultydb

facultydb> db

facultydb

facultydb> db.faculty.find()

[
  {
    _id: ObjectId('65c4711504b9ade2c90cdb6d'),
    fid: 4654,
    fname: 'SURYA'
  },
  {
    _id: ObjectId('65c4729404b9ade2c90cdb6e'),
    fid: 4414,
    fname: 'HARI'
  }
```

```
]
facultydb> db.faculty.find({})
[
  {
    _id: ObjectId('65c4711504b9ade2c90cdb6d'),
    fid: 4654,
    fname: 'SURYA'
  },
  {
    _id: ObjectId('65c4729404b9ade2c90cdb6e'),
    fid: 4414,
    fname: 'HARI'
  }
]
facultydb> db.faculty.updateMany({},{$set:{gender:"MALE"}})
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 2,
  modifiedCount: 2,
  upsertedCount: 0
}
facultydb> db.faculty.find()
[
  {
```

```
    _id: ObjectId('65c4711504b9ade2c90cdb6d'),

    fid: 4654,

    fname: 'SURYA',

    gender: 'MALE'

  },

  {

    _id: ObjectId('65c4729404b9ade2c90cdb6e'),

    fid: 4414,

    fname: 'HARI',

    gender: 'MALE'

  }

]

facultydb> bd.faculty.find({fid:4414})

ReferenceError: bd is not defined

facultydb> db.faculty.find({fid:4414})

[

  {

    _id: ObjectId('65c4729404b9ade2c90cdb6e'),

    fid: 4414,

    fname: 'HARI',

    gender: 'MALE'

  }

]

facultydb> db.faculty.updateOne({fid:4414},{$set:{fname:"SEETHA",gender:"FEMALE"}})

{
```

```
  acknowledged: true,

  insertedId: null,

  matchedCount: 1,

  modifiedCount: 1,

  upsertedCount: 0

}

facultydb> bd.faculty.find({fid:4414})

ReferenceError: bd is not defined

facultydb> db.faculty.find({fid:4414})

[
  {
    _id: ObjectId('65c4729404b9ade2c90cdb6e'),

    fid: 4414,

    fname: 'SEETHA',

    gender: 'FEMALE'
  }
]

facultydb> db.faculty.find()

[
  {
    _id: ObjectId('65c4711504b9ade2c90cdb6d'),

    fid: 4654,

    fname: 'SURYA',

    gender: 'MALE'
  },
```

```
  {
    _id: ObjectId('65c4729404b9ade2c90cdb6e'),
    fid: 4414,
    fname: 'SEETHA',
    gender: 'FEMALE'
  }
]
facultydb> db.faculty.updateOne({fid:1234},{$set:{fid:1870,fname:"SRI"}})
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
facultydb> db.faculty.updateOne({fid:1234},{$set:{fid:1870,fname:"SRI"}},{upsert:true})
{
  acknowledged: true,
  insertedId: ObjectId('65c5a6d3f490e57a7af530f0'),
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 1
}
facultydb> db.faculty.find()
[
```

```
  {
    _id: ObjectId('65c4711504b9ade2c90cdb6d'),
    fid: 4654,
    fname: 'SURYA',
    gender: 'MALE'
  },
  {
    _id: ObjectId('65c4729404b9ade2c90cdb6e'),
    fid: 4414,
    fname: 'SEETHA',
    gender: 'FEMALE'
  },
  {
    _id: ObjectId('65c5a6d3f490e57a7af530f0'),
    fid: 1870,
    fname: 'SRI'
  }
]
facultydb> db.faculty.find({gender:"MALE"})
[
  {
    _id: ObjectId('65c4711504b9ade2c90cdb6d'),
    fid: 4654,
    fname: 'SURYA',
    gender: 'MALE'
```

```
  }
]
facultydb> db.faculty.find({fid:1870})
[
  {
    _id: ObjectId('65c5a6d3f490e57a7af530f0'),
    fid: 1870,
    fname: 'SRI'
  }
]
facultydb>


facultydb> db.faculty.updateMany({fid:1870},{$set:{gender:"FEMALE"}})
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 1,
  upsertedCount: 0
}
facultydb> db.faculty.find({fid:1870})
[
  {
    _id: ObjectId('65c5a6d3f490e57a7af530f0'),
    fid: 1870,
```

```
    fname: 'SRI',

    gender: 'FEMALE'

  }

]

facultydb> db.faculty.countDocuments({gender:"FEMALE"})

2

facultydb> db.faculty.distint("gender")

TypeError: db.faculty.distint is not a function

facultydb> db.faculty.distinct("gender")

[ 'FEMALE', 'MALE' ]

facultydb> db.createCollection("emp")

{ ok: 1 }

facultydb> db.emp.insertMany([{_id:1,name:"A"},{_id:2,name:"B"}])

{ acknowledged: true, insertedIds: { '0': 1, '1': 2 } }

facultydb> db.emp.find()

[ { _id: 1, name: 'A' }, { _id: 2, name: 'B' } ]

facultydb> db.emp.insertMany([{_id:3,name:"C"},{_id:4,name:"D"}])

{ acknowledged: true, insertedIds: { '0': 3, '1': 4 } }

facultydb> db.emp.find()

[
  { _id: 1, name: 'A' },

  { _id: 2, name: 'B' },

  { _id: 3, name: 'C' },

  { _id: 4, name: 'D' }

]
```

```
facultydb> db.emp.find().size()

4

facultydb> db.emp.find().skip(1)

[ { _id: 2, name: 'B' }, { _id: 3, name: 'C' }, { _id: 4, name: 'D' } ]

facultydb> db.emp.find().skip(4)


facultydb> db.emp.find().skip(3)

[ { _id: 4, name: 'D' } ]

facultydb> db.emp.find({}).sort()

[
  { _id: 1, name: 'A' },

  { _id: 2, name: 'B' },

  { _id: 3, name: 'C' },

  { _id: 4, name: 'D' }

]

facultydb> db.emp.find({}).sort({name:-1})

[
  { _id: 4, name: 'D' },

  { _id: 3, name: 'C' },

  { _id: 2, name: 'B' },

  { _id: 1, name: 'A' }

]

facultydb> db.emp.find({}).sort({name:-1}).limit(1)

[ { _id: 4, name: 'D' } ]

facultydb> db.emp.updateOne({_id:1},{$set:{salary:1000.5}})
```

```
{

  acknowledged: true,

  insertedId: null,

  matchedCount: 1,

  modifiedCount: 1,

  upsertedCount: 0

}
faultydb> db.emp.updateOne({_id:2},{$set:{salary:2000.5}})

{

  acknowledged: true,

  insertedId: null,

  matchedCount: 1,

  modifiedCount: 1,

  upsertedCount: 0

}
faultydb> db.emp.updateOne({_id:3},{$set:{salary:3000.5}})

{

  acknowledged: true,

  insertedId: null,

  matchedCount: 1,

  modifiedCount: 1,

  upsertedCount: 0

}
faultydb> db.emp.updateOne({_id:4},{$set:{salary:4000.5}})

{
```

```
  acknowledged: true,

  insertedId: null,

  matchedCount: 1,

  modifiedCount: 1,

  upsertedCount: 0

}

facultydb> db.emp.find()

[

  { _id: 1, name: 'A', salary: 1000.5 },

  { _id: 2, name: 'B', salary: 2000.5 },

  { _id: 3, name: 'C', salary: 3000.5 },

  { _id: 4, name: 'D', salary: 4000.5 }

]

facultydb> db.emp.updateMany({},{$set:{gender:FEMALE}})

ReferenceError: FEMALE is not defined

facultydb> db.emp.updateMany({},{$set:{gender:"FEMALE"}})

{

  acknowledged: true,

  insertedId: null,

  matchedCount: 4,

  modifiedCount: 4,

  upsertedCount: 0

}

facultydb> db.emp.find()

[
```

```
  { _id: 1, name: 'A', salary: 1000.5, gender: 'FEMALE' },

  { _id: 2, name: 'B', salary: 2000.5, gender: 'FEMALE' },

  { _id: 3, name: 'C', salary: 3000.5, gender: 'FEMALE' },

  { _id: 4, name: 'D', salary: 4000.5, gender: 'FEMALE' }

]

facultydb> db.emp.updateMany({_id:2},{$set:{gender:"MALE"}})

{

  acknowledged: true,

  insertedId: null,

  matchedCount: 1,

  modifiedCount: 1,

  upsertedCount: 0

}

facultydb> db.emp.find()

[

  { _id: 1, name: 'A', salary: 1000.5, gender: 'FEMALE' },

  { _id: 2, name: 'B', salary: 2000.5, gender: 'MALE' },

  { _id: 3, name: 'C', salary: 3000.5, gender: 'FEMALE' },

  { _id: 4, name: 'D', salary: 4000.5, gender: 'FEMALE' }

]

facultydb> db.emp.updateOne({_id:4},{$set:{name:"C",gender:"MALE"}})

{

  acknowledged: true,

  insertedId: null,

  matchedCount: 1,
```

```
  modifiedCount: 1,

  upsertedCount: 0

}

facultydb> db.emp.find()

[

  { _id: 1, name: 'A', salary: 1000.5, gender: 'FEMALE' },

  { _id: 2, name: 'B', salary: 2000.5, gender: 'MALE' },

  { _id: 3, name: 'C', salary: 3000.5, gender: 'FEMALE' },

  { _id: 4, name: 'C', salary: 4000.5, gender: 'MALE' }

]

facultydb> db.emp.countDocuments(gender:"FEMALE")

Uncaught:

SyntaxError: Unexpected token, expected "," (1:28)


> 1 | db.emp.countDocuments(gender:"FEMALE")

   |                      ^

  2 |


facultydb> db.emp.countDocuments({gender:"FEMALE"})

2

facultydb> db.emp.find({})

[

  { _id: 1, name: 'A', salary: 1000.5, gender: 'FEMALE' },

  { _id: 2, name: 'B', salary: 2000.5, gender: 'MALE' },

  { _id: 3, name: 'C', salary: 3000.5, gender: 'FEMALE' },
```

```
  { _id: 4, name: 'C', salary: 4000.5, gender: 'MALE' }

]

facultydb> db.emp.find({},{name:1})

[

  { _id: 1, name: 'A' },

  { _id: 2, name: 'B' },

  { _id: 3, name: 'C' },

  { _id: 4, name: 'C' }

]

facultydb> db.emp.find({_id:4},{salary:1})

[ { _id: 4, salary: 4000.5 } ]

facultydb> db.emp.find({_id:3},{name:1,salary:1})

[ { _id: 3, name: 'C', salary: 3000.5 } ]

facultydb> db.emp.find({_id:3},{_id:0,name:1,salary:1})

[ { name: 'C', salary: 3000.5 } ]

facultydb> db.emp.find({salary:{$gt:2000}})

[

  { _id: 2, name: 'B', salary: 2000.5, gender: 'MALE' },

  { _id: 3, name: 'C', salary: 3000.5, gender: 'FEMALE' },

  { _id: 4, name: 'C', salary: 4000.5, gender: 'MALE' }

]

facultydb> db.emp.find({salary:{$lt:3000}})

[

  { _id: 1, name: 'A', salary: 1000.5, gender: 'FEMALE' },

  { _id: 2, name: 'B', salary: 2000.5, gender: 'MALE' }
```

```
]
facultydb> db.emp.find({salary:{$lte3000.5:3000}})

Uncaught:

SyntaxError: Unexpected token, expected "," (1:29)


> 1 | db.emp.find({salary:{$lte3000.5:3000}})

    |                     ^

 2 |


facultydb> db.emp.find({salary:{$lte:3000.5}})

[

 { _id: 1, name: 'A', salary: 1000.5, gender: 'FEMALE' },

 { _id: 2, name: 'B', salary: 2000.5, gender: 'MALE' },

 { _id: 3, name: 'C', salary: 3000.5, gender: 'FEMALE' }

]

facultydb> db.emp.find({salary:{$gte:2000.5}})

[

 { _id: 2, name: 'B', salary: 2000.5, gender: 'MALE' },

 { _id: 3, name: 'C', salary: 3000.5, gender: 'FEMALE' },

 { _id: 4, name: 'C', salary: 4000.5, gender: 'MALE' }

]

facultydb> db.emp.find({salary:{$ne:2000.5}})

[

 { _id: 1, name: 'A', salary: 1000.5, gender: 'FEMALE' },

 { _id: 3, name: 'C', salary: 3000.5, gender: 'FEMALE' },
```

{ _id: 4, name: 'C', salary: 4000.5, gender: 'MALE' }

]

facultydb> db.emp.find({salary:{$not:{$gt:2000.5}}})

[

  { _id: 1, name: 'A', salary: 1000.5, gender: 'FEMALE' },

  { _id: 2, name: 'B', salary: 2000.5, gender: 'MALE' }

]

facultydb> db.emp.find({})

[

  { _id: 1, name: 'A', salary: 1000.5, gender: 'FEMALE' },

  { _id: 2, name: 'B', salary: 2000.5, gender: 'MALE' },

  { _id: 3, name: 'C', salary: 3000.5, gender: 'FEMALE' },

  { _id: 4, name: 'C', salary: 4000.5, gender: 'MALE' }

]

facultydb>

facultydb> db.emp.updateMany({salary:{$gt:3000}},{$set:{salary:5000})

Uncaught:

SyntaxError: Unexpected token, expected "," (1:57)

> 1 | db.emp.updateMany({salary:{$gt:3000}},{$set:{salary:5000})

  | ^

 2 |

facultydb> db.emp.updateMany({salary:{$gt:3000}},{$set:{salary:5000}})

```
{
  acknowledged: true,

  insertedId: null,

  matchedCount: 2,

  modifiedCount: 2,

  upsertedCount: 0
}
```

facultydb> db.emp.find({})

```
[
  { _id: 1, name: 'A', salary: 1000.5, gender: 'FEMALE' },

  { _id: 2, name: 'B', salary: 2000.5, gender: 'MALE' },

  { _id: 3, name: 'C', salary: 5000, gender: 'FEMALE' },

  { _id: 4, name: 'C', salary: 5000, gender: 'MALE' }
]
```

facultydb> db.emp.find({name:{$in:["MALE","FEmale"]}})

facultydb> db.emp.find({gender:{$in:["MALE","FEmale"]}})

```
[
  { _id: 2, name: 'B', salary: 2000.5, gender: 'MALE' },

  { _id: 4, name: 'C', salary: 5000, gender: 'MALE' }
]
```

facultydb> db.emp.find({gender:{$in:["MALE","FEMALE"]}})

```
[
  { _id: 1, name: 'A', salary: 1000.5, gender: 'FEMALE' },

  { _id: 2, name: 'B', salary: 2000.5, gender: 'MALE' },
```

```
  { _id: 3, name: 'C', salary: 5000, gender: 'FEMALE' },

  { _id: 4, name: 'C', salary: 5000, gender: 'MALE' }

]

facultydb> db.emp.find({gender:{$in:["MALE","FEMALE","OTHERS"]}})

[

  { _id: 1, name: 'A', salary: 1000.5, gender: 'FEMALE' },

  { _id: 2, name: 'B', salary: 2000.5, gender: 'MALE' },

  { _id: 3, name: 'C', salary: 5000, gender: 'FEMALE' },

  { _id: 4, name: 'C', salary: 5000, gender: 'MALE' }

]

facultydb> db.emp.find({gender:{$nin:["MALE"]}})

[

  { _id: 1, name: 'A', salary: 1000.5, gender: 'FEMALE' },

  { _id: 3, name: 'C', salary: 5000, gender: 'FEMALE' }

]

facultydb> db.emp.renameCollection("employee")

{ ok: 1 }

facultydb> db.employee.renameCollection("emp")

{ ok: 1 }

facultydb>


facultydb> db.emp.updateMany({},{$rename:{salary:"sal"}})

{

  acknowledged: true,

  insertedId: null,
```

```
   matchedCount: 4,

   modifiedCount: 4,

   upsertedCount: 0

}

facultydb> db.emp.find({})

[

 { _id: 1, name: 'A', gender: 'FEMALE', sal: 1000.5 },

 { _id: 2, name: 'B', gender: 'MALE', sal: 2000.5 },

 { _id: 3, name: 'C', gender: 'FEMALE', sal: 5000 },

 { _id: 4, name: 'C', gender: 'MALE', sal: 5000 }

]

facultydb> db.emp.updateMany({_id:4},{$set:{sal:7000}})

{

   acknowledged: true,

   insertedId: null,

   matchedCount: 1,

   modifiedCount: 1,

   upsertedCount: 0

}

facultydb> db.emp.find({})

[

 { _id: 1, name: 'A', gender: 'FEMALE', sal: 1000.5 },

 { _id: 2, name: 'B', gender: 'MALE', sal: 2000.5 },

 { _id: 3, name: 'C', gender: 'FEMALE', sal: 5000 },

 { _id: 4, name: 'C', gender: 'MALE', sal: 7000 }
```

]

```
facultydb> db.emp.find({$and:[{gender:"FEMALE"},{sal:{$gt:2000}}]})

[ { _id: 3, name: 'C', gender: 'FEMALE', sal: 5000 } ]

facultydb> db.emp.find({$or:[{gender:"FEMALE"},{sal:{$gt:2000}}]})

[
  { _id: 1, name: 'A', gender: 'FEMALE', sal: 1000.5 },

  { _id: 2, name: 'B', gender: 'MALE', sal: 2000.5 },

  { _id: 3, name: 'C', gender: 'FEMALE', sal: 5000 },

  { _id: 4, name: 'C', gender: 'MALE', sal: 7000 }

]

facultydb> db.emp.find({$or:[{gender:"FEMALE"},{sal:{$lt:2000}}]})

[
  { _id: 1, name: 'A', gender: 'FEMALE', sal: 1000.5 },

  { _id: 3, name: 'C', gender: 'FEMALE', sal: 5000 }

]

facultydb>
```

SESSION-3

Microsoft Windows [Version 10.0.22631.3085]

(c) Microsoft Corporation. All rights reserved.

C:\Users\karthik>mongosh

Current Mongosh Log ID: 65cb40682fe9f2db2fa316f6

Connecting to: mongodb://127.0.0.1:27017/?directConnection=true&serverSelectionTimeoutMS=2000&appName=mongosh+2.1.3

Using MongoDB: 7.0.5

Using Mongosh: 2.1.3

For mongosh info see: https://docs.mongodb.com/mongodb-shell/

  The server generated these startup warnings when booting

  2024-02-12T17:24:07.801+05:30: Access control is not enabled for the database. Read and write access to data and configuration is unrestricted

------

test> show dbs

admin   40.00 KiB

```
config      72.00 KiB

facultydb  144.00 KiB

local      72.00 KiB

test> use facultydb

switched to db facultydb

facultydb> show collections

emp

faculty

facultydb> db.emp.find({})

[

  { _id: 1, name: 'A', gender: 'FEMALE', sal: 1000.5 },

  { _id: 2, name: 'B', gender: 'MALE', sal: 2000.5 },

  { _id: 3, name: 'C', gender: 'FEMALE', sal: 5000 },

  { _id: 4, name: 'C', gender: 'MALE', sal: 7000 }

]

facultydb> db.emp.find({}).sort({salary:-1})

[

  { _id: 1, name: 'A', gender: 'FEMALE', sal: 1000.5 },

  { _id: 2, name: 'B', gender: 'MALE', sal: 2000.5 },

  { _id: 3, name: 'C', gender: 'FEMALE', sal: 5000 },

  { _id: 4, name: 'C', gender: 'MALE', sal: 7000 }

]

facultydb> db.emp.find({}).sort({salary:-1}).limit(1)

[ { _id: 1, name: 'A', gender: 'FEMALE', sal: 1000.5 } ]

facultydb> db.emp.find({}).sort({sal:-1}).limit(1)
```

[{ _id: 4, name: 'C', gender: 'MALE', sal: 7000 }]

facultydb> db.emp.find({},{name:1}).sort({sal:-1}).limit(1)

[{ _id: 4, name: 'C' }]

facultydb> db.emp.find({},{_id:0,name:1}).sort({sal:-1}).limit(1)

[{ name: 'C' }]

facultydb> //aggregate functions or multi-document functions

facultydb> db.emp.aggregate({$count:"totalcount"})

[{ totalcount: 4 }]

facultydb> db.emp.aggregate({$group:{_id:null,totalsal:{$sum:"$sal"}}})

[{ _id: null, totalsal: 15001 }]

facultydb> db.emp.aggregate({$group:{_id:null,avgsal:{$avg:"$sal"}}})

[{ _id: null, avgsal: 3750.25 }]

facultydb> db.emp.aggregate({$group:{_id:null,minsal:{$min:"$sal"}}})

[{ _id: null, minsal: 1000.5 }]

facultydb> db.emp.aggregate({$group:{_id:null,maxsal:{$max:"$sal"}}})

[{ _id: null, maxsal: 7000 }]

facultydb> db.emp.aggregate({$group:{_id:null,totalsal:{$sum:"$sal"}}})

[{ _id: null, totalsal: 15001 }]

facultydb> db.emp.aggregate({$group:{_id:"$gender",totalsal:{$sum:"$sal"}}})

[
  { _id: 'FEMALE', totalsal: 6000.5 },
  { _id: 'MALE', totalsal: 9000.5 }
]

facultydb> db.emp.aggregate({$group:{_id:"$gender",avgsal:{$avg:"$sal"}}})

```
[

  { _id: 'FEMALE', avgsal: 3000.25 },

  { _id: 'MALE', avgsal: 4500.25 }

]

facultydb> db.emp.aggregate({$group:{_id:"$gender",minsal:{$min:"$sal"}}})

[ { _id: 'FEMALE', minsal: 1000.5 }, { _id: 'MALE', minsal: 2000.5 } ]

facultydb> db.emp.aggregate({$group:{_id:"$gender",maxsal:{$max:"$sal"}}})

[ { _id: 'FEMALE', maxsal: 5000 }, { _id: 'MALE', maxsal: 7000 } ]

facultydb> db.emp.aggregate({$match:{gender:"MALE"}})

[

  { _id: 2, name: 'B', gender: 'MALE', sal: 2000.5 },

  { _id: 4, name: 'C', gender: 'MALE', sal: 7000 }

]

facultydb> db.emp.aggregate([ {$match:{gender:"MALE"}} ,
{$group:{_id:"$gender",maxsal:{$max:"$sal"}}}  ])

[ { _id: 'MALE', maxsal: 7000 } ]

facultydb> db.emp.aggregate([ {$match:{gender:"FEMALE"}} ,
{$group:{_id:"$gender",maxsal:{$max:"$sal"}}}  ])

[ { _id: 'FEMALE', maxsal: 5000 } ]

facultydb> db.emp.aggregate({$match:{}})

[

  { _id: 1, name: 'A', gender: 'FEMALE', sal: 1000.5 },

  { _id: 2, name: 'B', gender: 'MALE', sal: 2000.5 },

  { _id: 3, name: 'C', gender: 'FEMALE', sal: 5000 },

  { _id: 4, name: 'C', gender: 'MALE', sal: 7000 }

]
```

```
facultydb> db.emp.aggregate([ {$match:{gender:"FEMALE"}} ,
{$group:{_id:"$gender",maxsal:{$max:"$sal"}}}  ])

[ { _id: 'FEMALE', maxsal: 5000 } ]

facultydb> db.emp.aggregate([ {$match:{gender:"MALE"}} ,
{$group:{_id:"$gender",maxsal:{$max:"$sal"}}}  ])

[ { _id: 'MALE', maxsal: 7000 } ]

facultydb> db.emp.aggregate([ {$match:{gender:"MALE"}} ,
{$group:{_id:"$gender",maxsal:{$max:"$sal"}}} , {$project:{maxsal:1,_id:0}}  ])

[ { maxsal: 7000 } ]

facultydb> db.emp.aggregate([ {$match:{}} , {$group:{_id:"$gender",maxsal:{$max:"$sal"}}} ,
{$project:{maxsal:1,_id:0}},  ])

[ { maxsal: 5000 }, { maxsal: 7000 } ]

facultydb> db.emp.aggregate([ {$match:{}} , {$group:{_id:"$gender",maxsal:{$max:"$sal"}}} ,
{$project:{maxsal:1,_id:0}},{$sort:{maxsal:1}}  ])

[ { maxsal: 5000 }, { maxsal: 7000 } ]

facultydb> db.emp.aggregate([ {$match:{}} , {$group:{_id:"$gender",maxsal:{$max:"$sal"}}} ,
{$project:{maxsal:1,_id:0}},{$sort:{maxsal:-1}}  ])

[ { maxsal: 7000 }, { maxsal: 5000 } ]

facultydb> db.emp.aggregate([ {$match:{}} , {$group:{_id:"$gender",maxsal:{$max:"$sal"}}} ,
{$project:{maxsal:1,_id:0}},{$sort:{maxsal:-1}},{$limit:1}  ])

[ { maxsal: 7000 } ]

facultydb> db.emp.find({})

[
  { _id: 1, name: 'A', gender: 'FEMALE', sal: 1000.5 },
  { _id: 2, name: 'B', gender: 'MALE', sal: 2000.5 },
  { _id: 3, name: 'C', gender: 'FEMALE', sal: 5000 },
  { _id: 4, name: 'C', gender: 'MALE', sal: 7000 }
]
```

```
facultydb> db.emp.find({sal:{$not:{$gt:2000}}})

[ { _id: 1, name: 'A', gender: 'FEMALE', sal: 1000.5 } ]

facultydb> db.emp.updateMany({},{$set:{location:"VIZAG"}})

{

  acknowledged: true,

  insertedId: null,

  matchedCount: 4,

  modifiedCount: 4,

  upsertedCount: 0

}

facultydb> db.emp.find({})

[

 {

   _id: 1,

   name: 'A',

   gender: 'FEMALE',

   sal: 1000.5,

   location: 'VIZAG'

 },

 { _id: 2, name: 'B', gender: 'MALE', sal: 2000.5, location: 'VIZAG' },

 { _id: 3, name: 'C', gender: 'FEMALE', sal: 5000, location: 'VIZAG' },

 { _id: 4, name: 'C', gender: 'MALE', sal: 7000, location: 'VIZAG' }

]

facultydb> db.emp.updateMany({},{$unset:{location:""}})

{
```

acknowledged: true,

  insertedId: null,

  matchedCount: 4,

  modifiedCount: 4,

  upsertedCount: 0

}

facultydb> db.emp.find({})

[

  { _id: 1, name: 'A', gender: 'FEMALE', sal: 1000.5 },

  { _id: 2, name: 'B', gender: 'MALE', sal: 2000.5 },

  { _id: 3, name: 'C', gender: 'FEMALE', sal: 5000 },

  { _id: 4, name: 'C', gender: 'MALE', sal: 7000 }

]

facultydb> db.emp.aggregate([{$match:{}} , {$out:"person"}])

facultydb> show collections

emp

faculty

person

facultydb>

SESSION-4

C:\Users\karthik>mongosh

Current Mongosh Log ID: 65cda5c4e7feda17910f3723

Connecting to: mongodb://127.0.0.1:27017/?directConnection=true&serverSelectionTimeoutMS=2000&appName=mongosh+2.1.3

Using MongoDB: 7.0.5

Using Mongosh: 2.1.3

mongosh 2.1.4 is available for download: https://www.mongodb.com/try/download/shell

For mongosh info see: https://docs.mongodb.com/mongodb-shell/

   The server generated these startup warnings when booting

   2024-02-15T10:35:00.660+05:30: Access control is not enabled for the database. Read and write access to data and configuration is unrestricted

------

```
test> show dbs

admin      40.00 KiB

config     72.00 KiB

facultydb  184.00 KiB

local      76.00 KiB

test> use facultydb

switched to db facultydb

facultydb> show collections

emp

faculty

person

facultydb> db.emp.find({})

[
  { _id: 1, name: 'A', gender: 'FEMALE', sal: 1000.5 },

  { _id: 2, name: 'B', gender: 'MALE', sal: 2000.5 },

  { _id: 3, name: 'C', gender: 'FEMALE', sal: 5000 },

  { _id: 4, name: 'C', gender: 'MALE', sal: 7000 }
]

facultydb> db.emp.updateOne({_id:1},{$set:{location:"VJA"}})

{
  acknowledged: true,

  insertedId: null,

  matchedCount: 1,

  modifiedCount: 1,

  upsertedCount: 0
```

```
}
facultydb> db.emp.updateOne({_id:2},{$set:{location:"VIZAG"}})
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 1,
  upsertedCount: 0
}
facultydb> db.emp.updateOne({_id:3},{$set:{location:"GUNTUR"}})
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 1,
  upsertedCount: 0
}
facultydb> db.emp.updateOne({_id:4},{$set:{location:"SHIRIDI"}})
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 1,
  upsertedCount: 0
}
```

```
facultydb> db.emp.find({})

[

  { _id: 1, name: 'A', gender: 'FEMALE', sal: 1000.5, location: 'VJA' },

  { _id: 2, name: 'B', gender: 'MALE', sal: 2000.5, location: 'VIZAG' },

  {

    _id: 3,

    name: 'C',

    gender: 'FEMALE',

    sal: 5000,

    location: 'GUNTUR'

  },

  { _id: 4, name: 'C', gender: 'MALE', sal: 7000, location: 'SHIRIDI' }

]

facultydb> db.emp.find({},{name:1,location:1})

[

  { _id: 1, name: 'A', location: 'VJA' },

  { _id: 2, name: 'B', location: 'VIZAG' },

  { _id: 3, name: 'C', location: 'GUNTUR' },

  { _id: 4, name: 'C', location: 'SHIRIDI' }

]

facultydb> db.emp.find({location:/^V/})    //starts with

[

  { _id: 1, name: 'A', gender: 'FEMALE', sal: 1000.5, location: 'VJA' },

  { _id: 2, name: 'B', gender: 'MALE', sal: 2000.5, location: 'VIZAG' }

]
```

```
facultydb> db.emp.find({location:/I$/})    //ends with

[

  { _id: 4, name: 'C', gender: 'MALE', sal: 7000, location: 'SHIRIDI' }

]

facultydb> db.emp.find({location:/^VI/})    //starts with

[

  { _id: 2, name: 'B', gender: 'MALE', sal: 2000.5, location: 'VIZAG' }

]

facultydb> db.emp.find({location:/UR$/})    //ends with

[

 {

   _id: 3,

   name: 'C',

   gender: 'FEMALE',

   sal: 5000,

   location: 'GUNTUR'

 }

]

facultydb> db.emp.find({location:/NT/})    // contains

[

 {

   _id: 3,

   name: 'C',

   gender: 'FEMALE',

   sal: 5000,
```

```
     location: 'GUNTUR'

  }

]

facultydb> db.emp.find({location:/I.*A/})   // in * means zero or more charecters

[

  { _id: 2, name: 'B', gender: 'MALE', sal: 2000.5, location: 'VIZAG' }

]

facultydb> db.emp.find({location:/S.*I/})

[

  { _id: 4, name: 'C', gender: 'MALE', sal: 7000, location: 'SHIRIDI' }

]

facultydb> db.emp.find({location:/^S.*I$/})

[

  { _id: 4, name: 'C', gender: 'MALE', sal: 7000, location: 'SHIRIDI' }

]

facultydb> db.createCollection("student")

{ ok: 1 }

facultydb> show collections

emp

faculty

person

student

facultydb> db.student.insertOne({_id:101,name:"MONIKA",skills:["AWS","MSWD"]})

{ acknowledged: true, insertedId: 101 }

facultydb> db.student.insertOne({_id:102,name:"TEJU",skills:["AWS"]})
```

```
{ acknowledged: true, insertedId: 102 }

facultydb> db.student.insertOne({_id:103,name:"PRABHAS",skills:["AWS","PFSD"]})

{ acknowledged: true, insertedId: 103 }

facultydb> db.student.find({})

[
  { _id: 101, name: 'MONIKA', skills: [ 'AWS', 'MSWD' ] },
  { _id: 102, name: 'TEJU', skills: [ 'AWS' ] },
  { _id: 103, name: 'PRABHAS', skills: [ 'AWS', 'PFSD' ] }
]

facultydb> db.emp.find({})

[
  { _id: 1, name: 'A', gender: 'FEMALE', sal: 1000.5, location: 'VJA' },
  { _id: 2, name: 'B', gender: 'MALE', sal: 2000.5, location: 'VIZAG' },
  {
    _id: 3,
    name: 'C',
    gender: 'FEMALE',
    sal: 5000,
    location: 'GUNTUR'
  },
  { _id: 4, name: 'C', gender: 'MALE', sal: 7000, location: 'SHIRIDI' }
]

facultydb> db.emp.find({}).forEach( (e) => {
... print(e)
... })
```

{ _id: 1, name: 'A', gender: 'FEMALE', sal: 1000.5, location: 'VJA' }

{ _id: 2, name: 'B', gender: 'MALE', sal: 2000.5, location: 'VIZAG' }

{ _id: 3, name: 'C', gender: 'FEMALE', sal: 5000, location: 'GUNTUR' }

{ _id: 4, name: 'C', gender: 'MALE', sal: 7000, location: 'SHIRIDI' }


```
facultydb> db.emp.find({sal:{$gt:2000}}).forEach((e) => { print(e); })
```

{ _id: 2, name: 'B', gender: 'MALE', sal: 2000.5, location: 'VIZAG' }

{ _id: 3, name: 'C', gender: 'FEMALE', sal: 5000, location: 'GUNTUR' }

{ _id: 4, name: 'C', gender: 'MALE', sal: 7000, location: 'SHIRIDI' }


```
facultydb> db.emp.find({sal:{$gt:2000}}).forEach((e) => { print(e._id); })
```

2

3

4


```
facultydb> db.emp.find({sal:{$gt:2000}}).forEach((e) => { print(e._id+","+e.name); })
```

2,B

3,C

4,C


```
facultydb>
```