

MongoDB All Program

1. create a database

```
use collage
```

output:-

```
switched to db collage
```

10. VIEW STORAGE SIZE OF COLLECTION IN MONGODB

```
use collage
db.createCollection("stud")
show collections
db.stud.storageSize()
```

output:-

```
8192
```

11. VIEW SIZE OF COLLECTION IN MONGODB

```
use collage
db.createCollection("stud")
db.stud.insert({"name":"bhautik","age":20})
db.stud.find()
db.stud.dataSize()
```

output:-

```
112
```

12. insert record in collection

```
use collage
db.createCollection("stud")
db.stud.insert({"name":"bhautik","age":20})
db.stud.find()
```

output:-

```
Inserted 1 record(s) in 1ms
{
  "_id" : ObjectId("62f0968e648b102f9951fa57"),
  "name" : "bhautik",
  "age" : 20.0
}
```

13. insert record using variable in collection

```
use collage
db.createCollection("stud")
var s=[
```

```
{
  "rIno":1,
  "name":"bhautik"
},
{
  "rIno":2,
  "name":"bhargav"
}
]
db.stud.insert(s)
db.stud.find()
```

output:-

```
{
  "_id" : ObjectId("62f09d21648b102f9951fa67"),
  "rIno" : 1.0,
  "name" : "bhautik"
}
{
  "_id" : ObjectId("62f09d21648b102f9951fa68"),
  "rIno" : 2.0,
  "name" : "bhargav"
}
```

14. insert a single documents into a collection.

```
use collage
db.createCollection("stud")
db.stud.insertOne(
{
  "rIno":1,
  "name":"maru"
})
db.stud.find()
```

output:-

```
{
  "acknowledged" : true,
  "insertedId" : ObjectId("62f0a0ed648b102f9951fa6a")
}
{
  "_id" : ObjectId("62f09f46648b102f9951fa69"),
  "rIno" : 1.0,
  "name" : "maru"
}
```

15. insert a multiple documents into a collection.

```
use collage
db.createCollection("stud")
db.stud.insertMany([
```

```
{
  "rln":1,
  "name":"ali"
},
{
  "rln":2,
  "name":"dharmesh"
})
db.stud.find()
```

output:-

```
{
  "acknowledged" : true,
  "insertedIds" : [
    ObjectId("62f0a28a648b102f9951fa70"),
    ObjectId("62f0a28a648b102f9951fa71")
  ]
}
{
  "_id" : ObjectId("62f0a238648b102f9951fa6e"),
  "rln" : 1.0,
  "name" : "ali"
}
{
  "_id" : ObjectId("62f0a238648b102f9951fa6f"),
  "rln" : 2.0,
  "name" : "dharmesh"
}
```

16.insert record in save time

```
use collage
db.createCollection("stud")
db.stud.insert(
{
  "rln":1,
  "name":"ali"
})
db.stud.save(
{
  "rln":10,
  "name":"hitesh"
})
db.stud.find()
```

output

```
{
  "_id" : ObjectId("62f0a445648b102f9951fa74"),
```

```
"rlno" : 1.0,
"name" : "ali"
}
{
  "_id" : ObjectId("62f0a48c648b102f9951fa75"),
  "rlno" : 10.0,
  "name" : "hitesh"
}
```

17. DISPLAY ALL DOCUMENTS USING FIND().

```
use collage
db.createCollection("stud")
db.stud.insert(
{
  "rlno":1,
  "name":"ali"
}
)
db.stud.find()
```

output:-

```
{
  "_id" : ObjectId("62f0a6bc648b102f9951fa79"),
  "rlno" : 1.0,
  "name" : "ali"
}
```

18.display particular record in collections.

```
use collage
db.createCollection("stud")
db.stud.insertMany([
{
  "name":"ali",
  "stream":"bcom"
},
{
  "name":"bhautik",
  "stream":"mscit"
},
{
  "name":"bhargav",
  "stream":"bca"
}
])
db.stud.find({stream:"mscit"})
```

output

```
{
  "_id" : ObjectId("62f0a915648b102f9951fa7d"),
```

```
"name" : "bhautik",  
"stream" : "mscit"  
}
```

19.pretty command

```
use collage  
db.createCollection("stud")  
db.stud.insertMany([  
  {  
    "name":"ali",  
    "stream":"bcom"  
  },  
  {  
    "name":"bhautik",  
    "stream":"mscit"  
  }  
])  
db.stud.find().pretty()
```

output:-

```
{  
  "_id" : ObjectId("62f0b1d9648b102f9951fa89"),  
  "name" : "ali",  
  "stream" : "bcom"  
}  
{  
  "_id" : ObjectId("62f0b1d9648b102f9951fa8a"),  
  "name" : "bhautik",  
  "stream" : "mscit"  
}
```

20. print data json formate

```
use collage  
db.createCollection("stud")  
db.stud.insertMany([  
  {  
    "name":"ali",  
    "stream":"bcom"  
  },  
  {  
    "name":"bhautik",  
    "stream":"mscit"  
  }  
])  
db.stud.find().pretty().forEach(printjson)
```

output:-

```
{  
  "_id" : ObjectId("62f0b1d9648b102f9951fa89"),
```

```
"name" : "ali",
"stream" : "bcom"
}
{
  "_id" : ObjectId("62f0b1d9648b102f9951fa8a"),
  "name" : "bhautik",
  "stream" : "mscit"
}
```

21. remove insert data in collections.

```
use collage
db.createCollection("stud")
db.stud.remove({})
```

output:-

Removed 2 record(s) in 1ms

22.count method use limit(),skip(),quary

```
use collage
db.createCollection("stud")
db.stud.insertMany([
{
  "rIno":1,
  "name":"dharmesh",
  "stream":"MCA"
},
{
  "rIno":2,
  "name":"bhautik",
  "stream":"MCA"
},
{
  "rIno":3,
  "name":"hitesh",
  "stream":"MCA"
}
])
db.stud.find().count()
db.stud.count({stream:"MCA"})
db.stud.find({stream:"MCA"}).limit(2).count(true)
```

output

```
3
3
2
```

update program

23.UPDATE A SINGLE DOCUMENT

```
use collage
db.createCollection("stud")
db.stud.insertMany([
{
  "rIno":1,
  "name":"dharmesh",
  "salary":50000
}
])
db.stud.update({rIno:2},{$set:{salary:100000}})
db.stud.find()
```

output

```
{
  "_id" : ObjectId("62f3310c2af34e840204f17a"),
  "rIno" : 1.0,
  "name" : "dharmesh",
  "salary" : 100000.0
}
```

24. update multiple documents in MongoDB by using update()

```
use collage
db.createCollection("stud")
db.stud.insertMany([
{
  "rIno":1,
  "name":"dharmesh",
  "stream":"mca"
},
{
  "rIno":2,
  "name":"bhautik",
  "stream":"mca"
},
{
  "rIno":3,
  "name":"bhautik",
  "stream":"mca"
}
])
db.stud.update({stream:"mca"},{$set:{stream:"mcsit"}},{multi:true})
db.stud.find()
```

output:-

```
{
  "_id" : ObjectId("62f334682af34e840204f17f"),
  "rIno" : 1.0,
  "name" : "dharmesh",
  "stream" : "mscit"
}
{
  "_id" : ObjectId("62f334682af34e840204f180"),
  "rIno" : 2.0,
  "name" : "bhautik",
  "stream" : "mscit"
}
{
  "_id" : ObjectId("62f334682af34e840204f181"),
  "rIno" : 3.0,
  "name" : "bhautik",
  "stream" : "mscit"
} "stream" : "mscit"
}
```

25. set operator with specific field

```
use collage
db.createCollection("stud")
db.stud.insertMany([
{
  "rIno":1,
  "name": "dharmesh",
  "stream": "mca"
},
{
  "rIno":2,
  "name": "bhautik",
  "stream": "mca"
},
{
  "rIno":3,
  "name": "bhautik",
  "stream": "mca"
}
])
db.stud.update({rIno:1},{set:{stream:"mscit"}})
db.stud.find()
```

output

Updated 1 existing record(s) in Oms

```
{
  "_id" : ObjectId("62f71ac43a6659a6f4ae9277"),
  "rIno" : 1.0,
  "name" : "dharmesh",
  "stream" : "mscit"
}
{
  "_id" : ObjectId("62f71ac43a6659a6f4ae9278"),
  "rIno" : 2.0,
  "name" : "bhautik",
  "stream" : "mca"
}
{
  "_id" : ObjectId("62f71ac43a6659a6f4ae9279"),
  "rIno" : 3.0,
  "name" : "bhautik",
  "stream" : "mca"
}
}
```

26. unset operator with update

```
use collage
db.createCollection("stud")
db.stud.insertMany([
{
  "rIno":1,
  "name":"dharmesh",
  "stream":"mca"
},
{
  "rIno":2,
  "name":"bhautik",
  "stream":"mca"
},
{
  "rIno":3,
  "name":"hitesh",
  "stream":"mca"
}
])
db.stud.update({},{$unset:{rIno:"1"}})
db.stud.find()
```

output

Updated 1 existing record(s) in 0ms

```
{
  "_id" : ObjectId("63030c92221575dcff212d88"),
  "name" : "dharmesh",
```

```
"stream" : "mca"
}
{
  "_id" : ObjectId("63030c92221575dcff212d89"),
  "rlno" : 2.0,
  "name" : "bhautik",
  "stream" : "mca"
}
{
  "_id" : ObjectId("63030c92221575dcff212d8a"),
  "rlno" : 3.0,
  "name" : "hitesh",
  "stream" : "mca"
}
```

27. \$inc (increment) in particular field with update

```
use collage
db.createCollection("stud")
db.stud.insertMany([
{
  "rlno":2,
  "name":"bhautik",
  "salary":100000
}
])
db.stud.update({name:"bhautik"},{$inc:{salary:100000}})
db.stud.find()
```

```
output
Updated 1 existing record(s) in 1ms
```

```
{
  "_id" : ObjectId("63031202221575dcff212d8f"),
  "rlno" : 2.0,
  "name" : "bhautik",
  "salary" : 200000.0
}
```

28. \$rename operator is used to updates the name of a field

```
use collage
db.createCollection("stud")
db.stud.insertMany([
{
  "rlno":1,
  "name":"dharmesh",
  "salary":10000
},
{
  "rlno":2,
```

```

    "name":"bhautik",
    "salary":100000
  },
  {
    "rln":3,
    "name":"hitesh",
    "salary":1000
  }
])
db.stud.update({rlno:{$gt:0}},{$rename:{rln:'rollno'}},{multi:true})
db.stud.find()

```

output

Updated 3 existing record(s) in 1ms

```

{
  "_id" : ObjectId("63031724221575dcff212d97"),
  "name" : "dharmesh",
  "salary" : 10000.0,
  "rollno" : 1.0
}
{
  "_id" : ObjectId("63031724221575dcff212d98"),
  "name" : "bhautik",
  "salary" : 100000.0,
  "rollno" : 2.0
}
{
  "_id" : ObjectId("63031724221575dcff212d99"),
  "name" : "hitesh",
  "salary" : 1000.0,
  "rollno" : 3.0
}

```

29. Remove () method is used to remove a document from the collection

DELETE ALL DOCUMENT FROM STUD COLLECTION

```

use collage
db.createCollection("stud")
db.stud.insertMany([
  {
    "rln":1,
    "name":"dharmesh",
    "salary":10000
  },
  {
    "rln":2,

```

```
"name":"bhautik",
"salary":100000
},
{
  "rln":3,
  "name":"hitesh",
  "salary":1000
}
])
db.stud.remove({})
```

output

Removed 3 record(s) in 1ms

30. DELETE ONE DOCUMENT WHO IS IN MSCIT.{justone}

```
use collage
db.createCollection("stud")
db.stud.insertMany([
{
  "rln":1,
  "name":"dharmesh",
  "stream":"MCA"
},
{
  "rln":2,
  "name":"bhautik",
  "stream":"MCA"
},
{
  "rln":3,
  "name":"hitesh",
  "stream":"MCA"
}
])
db.stud.remove({"stream":"MCA"},{justOne : 1})
db.stud.find()
```

output

Removed 1 record(s) in 1ms

```
{
  "_id" : ObjectId("63031ceb221575dcff212da1"),
  "rln" : 2.0,
  "name" : "bhautik",
```

```
"stream" : "MCA"
}
{
  "_id" : ObjectId("63031ceb221575dcff212da2"),
  "rlno" : 3.0,
  "name" : "hitesh",
  "stream" : "MCA"
}
```

31. DELETE ALL DOCUMENT WHERE RLNO > 1

```
use collage
db.createCollection("stud")
db.stud.insertMany([
{
  "rlno":1,
  "name":"dharmesh",
  "stream":"MCA"
},
{
  "rlno":2,
  "name":"bhautik",
  "stream":"MCA"
},
{
  "rlno":3,
  "name":"hitesh",
  "stream":"MCA"
}
])
db.stud.remove({'rlno':{'$gt':1}})
db.stud.find()
```

output

Removed 2 record(s) in 1ms

```
{
  "_id" : ObjectId("63031e08221575dcff212da6"),
  "rlno" : 1.0,
  "name" : "dharmesh",
  "stream" : "MCA"
}
```

32. DELETE ONE DOCUMENT FROM STUD COLLECTION WHO ARE IN MCA.

```
use collage
db.createCollection("stud")
db.stud.insertMany([
```

```
{
  "rIno":1,
  "name":"dharmesh",
  "stream":"MCA"
},
{
  "rIno":2,
  "name":"bhautik",
  "stream":"MCA"
},
{
  "rIno":3,
  "name":"hitesh",
  "stream":"MCA"
}
])
db.stud.deleteOne({stream:"MCA"})
db.stud.find()
```

output

```
{
  "acknowledged" : true,
  "deletedCount" : 1.0
}

{
  "_id" : ObjectId("630320bb221575dcff212db0"),
  "rIno" : 2.0,
  "name" : "bhautik",
  "stream" : "MCA"
}
{
  "_id" : ObjectId("630320bb221575dcff212db1"),
  "rIno" : 3.0,
  "name" : "hitesh",
  "stream" : "MCA"
}
```

33. MongoDB's deleteMany () method is used to remove a more than one Document from the collection

```
use collage
db.createCollection("stud")
db.stud.insertMany([
{
  "rIno":1,
  "name":"dharmesh",
```

```
"stream":"MCA"
},
{
  "rln":2,
  "name":"bhautik",
  "stream":"MCA"
},
{
  "rln":3,
  "name":"hitesh",
  "stream":"MCA"
}
])
db.stud.deleteMany({stream:"MCA"})
```

output

```
{
  "acknowledged" : true,
  "deletedCount" : 3.0
}
```

34. Limit () provides the limitations of documents to be displayed in MongoDB.

```
use collage
db.createCollection("stud")
db.stud.insertMany([
{
  "rln":1,
  "name":"dharmesh",
  "stream":"MCA"
},
{
  "rln":2,
  "name":"bhautik",
  "stream":"MCA"
},
{
  "rln":3,
  "name":"hitesh",
  "stream":"MCA"
}
])
db.stud.find().limit(2)
db.stud.find({rln:{$gt:1}}).limit(1)
```

output

```
{
  "_id" : ObjectId("6305b030c8d65abca5638d8"),
  "rIno" : 1.0,
  "name" : "dharmesh",
  "stream" : "MCA"
}
{
  "_id" : ObjectId("6305b859c8d65abca5638df"),
  "rIno" : 2.0,
  "name" : "bhautik",
  "stream" : "MCA"
}
```

35.Skip () methods provides a facility to skip the documents from total documents

```
use collage
db.createCollection("stud")
db.stud.insertMany([
{
  "rIno":1,
  "name": "dharmesh",
  "stream": "MCA"
},
{
  "rIno":2,
  "name": "bhautik",
  "stream": "MCA"
},
{
  "rIno":3,
  "name": "hitesh",
  "stream": "MCA"
}
])
db.stud.find().skip(2).pretty()
db.stud.find({rIno: {$gt:1}}).limit(2).skip(1).pretty()
```

output

```
{
  "_id" : ObjectId("6305b859c8d65abca5638e0"),
  "rIno" : 3.0,
  "name" : "hitesh",
  "stream" : "MCA"
}
```

36.Sort () methods used to arrange document either in ascending or descending order.

->used 1 for ascending order

->used -1 for descending order

```
use collage
db.createCollection("stud")
db.stud.insertMany([
{
  "rln":1,
  "name":"dharmesh",
  "stream":"MCA"
},
{
  "rln":2,
  "name":"bhautik",
  "stream":"MCA"
},
{
  "rln":3,
  "name":"hitesh",
  "stream":"MCA"
}
])

db.stud.find().sort({rln:1})
db.stud.find().sort({rln :-1}).pretty()
```

output

ascending order

```
{
  "_id" : ObjectId("6305ba58c8d65abcd5638e1"),
  "rln" : 1.0,
  "name" : "dharmesh",
  "stream" : "MCA"
}
{
  "_id" : ObjectId("6305ba58c8d65abcd5638e2"),
  "rln" : 2.0,
  "name" : "bhautik",
  "stream" : "MCA"
}
{
  "_id" : ObjectId("6305ba58c8d65abcd5638e3"),
  "rln" : 3.0,
  "name" : "hitesh",
  "stream" : "MCA"
}
```

```
}
```

distending order

```
{
  "_id" : ObjectId("6305ba58c8d65abcad5638e3"),
  "rIno" : 3.0,
  "name" : "hitesh",
  "stream" : "MCA"
}
{
  "_id" : ObjectId("6305ba58c8d65abcad5638e2"),
  "rIno" : 2.0,
  "name" : "bhautik",
  "stream" : "MCA"
}
{
  "_id" : ObjectId("6305ba58c8d65abcad5638e1"),
  "rIno" : 1.0,
  "name" : "dharmesh",
  "stream" : "MCA"
}
}
```

AGGREGATION IN MONGODB

37. COUNT WITH AGGREGATION:

```
use collage
db.createCollection("stud")
db.stud.insertMany([
{
  "rIno":1,
  "name":"dharmesh",
  "stream":"MCA"
},
{
  "rIno":2,
  "name":"bhautik",
  "stream":"MCA"
},
{
  "rIno":3,
  "name":"hitesh",
  "stream":"MCA"
}
])
db.stud.find().count() //simple count
db.stud.aggregate([]) //simple aggregate
db.stud.aggregate([]).toArray().length // aggregate count with array
```

output

3

38. \$match WITH AGGREGATION:

```
use collage
db.createCollection("stud")
db.stud.insertMany([
{
  "rlno":1,
  "name":"dharmesh",
  "stream":"MCA",
  "city":"ahmadabad"
},
{
  "rlno":2,
  "name":"bhautik",
  "stream":"MCA",
  "city":"Rajkot"
},
{
  "rlno":3,
  "name":"hitesh",
  "stream":"MCA",
  "city":"Rajkot"
}
])
db.stud.find({city:"Rajkot"}).pretty();
db.stud.aggregate({ $match:{city:"Rajkot"}}).pretty();
```

output

```
{
  "_id" : ObjectId("631c2a9b140c166845220220"),
  "rlno" : 2.0,
  "name" : "bhautik",
  "stream" : "MCA",
  "city" : "Rajkot"
}
{
  "_id" : ObjectId("631c2a9b140c166845220221"),
  "rlno" : 3.0,
  "name" : "hitesh",
  "stream" : "MCA",
  "city" : "Rajkot"
}
```

39. \$match WITH \$lt AGGREGATION:

```
use collage
db.createCollection("stud")
db.stud.insertMany([
{
```

```

"rIno":1,
"name":"dharmesh",
"stream":"MCA",
"city":"ahmadabad",
"percentage":50
},
{
"rIno":2,
"name":"bhautik",
"stream":"MCA",
"city":"Rajkot",
"percentage":90
},
{
"rIno":3,
"name":"hitesh",
"stream":"MCA",
"city":"Rajkot",
"percentage":70
}
]
db.stud.find({percentage:{$lt:60}}).pretty()
db.stud.aggregate({$match:{percentage:{$lt:60}}}).pretty();

```

output

```

{
  "_id" : ObjectId("63200b38f5a060a4903dd9af"),
  "rIno" : 1.0,
  "name" : "dharmesh",
  "stream" : "MCA",
  "city" : "ahmadabad",
  "percentage" : 50.0
}

```

40. \$match WITH \$ne AGGREGATION:

```

use collage
db.createCollection("stud")
db.stud.insertMany([
{
"rIno":1,
"name":"dharmesh",
"stream":"MCA",
"city":"ahmadabad",
"percentage":50
},
{
"rIno":2,
"name":"bhautik",
"stream":"MCA",

```

```

    "city":"Rajkot",
    "percentage":90
  },
  {
    "rIno":3,
    "name":"hitesh",
    "stream":"MCA",
    "city":"Rajkot",
    "percentage":70
  }
])
db.stud.find({city:{$ne:"Rajkot"}}).pretty();
db.stud.aggregate({$match:{city:{$ne:"Rajkot"}}}).pretty();

```

output

```

{
  "_id" : ObjectId("63200b38f5a060a4903dd9af"),
  "rIno" : 1.0,
  "name" : "dharmesh",
  "stream" : "MCA",
  "city" : "ahmadabad",
  "percentage" : 50.0
}

```

41. \$group AGGREGATION:

```

use collage
db.createCollection("stud")
db.stud.insertMany([
  {
    "rIno":1,
    "name":"dharmesh",
    "stream":"MCA",
    "city":"ahmadabad",
    "percentage":50,
    "state":"Rajasthan"
  },
  {
    "rIno":2,
    "name":"bhautik",
    "stream":"MCA",
    "city":"Rajkot",
    "state":"gujrat",
    "percentage":90
  },
  {
    "rIno":3,
    "name":"hitesh",
    "stream":"MCA",

```

```

"city":"Rajkot",
"percentage":70,
"state":"Rajasthan"
}
])
db.stud.aggregate(
  {
    $group: {_id:"$state", minPercentage:{$min:"$percentage"}}
  }
);

```

Output

```

{
  "_id" : "gujrat",
  "minPercentage" : 90.0
}
{
  "_id" : "Rajasthan",
  "minPercentage" : 50.0
}

```

42. \$sort AGGREGATION(ascending and disending)

```

use collage
db.createCollection("stud")
db.stud.insertMany([
  {
    "rln":1,
    "name":"dharmesh",
    "stream":"MCA",
    "city":"ahmadabad",
    "percentage":50,
    "state":"Rajasthan"
  },
  {
    "rln":2,
    "name":"bhautik",
    "stream":"MCA",
    "city":"Rajkot",
    "state":"gujrat",
    "percentage":90
  },
  {
    "rln":3,
    "name":"hitesh",
    "stream":"MCA",
    "city":"Rajkot",
    "percentage":70,
    "state":"Rajasthan"
  }
])

```

```
}
])
db.stud.aggregate({$sort:{percentage:1}})
db.stud.aggregate({$sort:{percentage:-1}})
```

output:

```
{
  "_id" : ObjectId("63201122f5a060a4903dd9b5"),
  "rlno" : 1.0,
  "name" : "dharmesh",
  "stream" : "MCA",
  "city" : "ahmadabad",
  "percentage" : 50.0,
  "state" : "Rajasthan"
}
{
  "_id" : ObjectId("63201122f5a060a4903dd9b7"),
  "rlno" : 3.0,
  "name" : "hitesh",
  "stream" : "MCA",
  "city" : "Rajkot",
  "percentage" : 70.0,
  "state" : "Rajasthan"
}
{
  "_id" : ObjectId("63201122f5a060a4903dd9b6"),
  "rlno" : 2.0,
  "name" : "bhautik",
  "stream" : "MCA",
  "city" : "Rajkot",
  "state" : "gujrat",
  "percentage" : 90.0
}
```

Disendding

```
{
  "_id" : ObjectId("63201122f5a060a4903dd9b6"),
  "rlno" : 2.0,
  "name" : "bhautik",
  "stream" : "MCA",
  "city" : "Rajkot",
  "state" : "gujrat",
  "percentage" : 90.0
}
{
  "_id" : ObjectId("63201122f5a060a4903dd9b7"),
  "rlno" : 3.0,
  "name" : "hitesh",
  "stream" : "MCA",
  "city" : "Rajkot",
  "percentage" : 70.0,
  "state" : "Rajasthan"
}
```

```
}
{
  "_id" : ObjectId("63201122f5a060a4903dd9b5"),
  "rIno" : 1.0,
  "name" : "dharmesh",
  "stream" : "MCA",
  "city" : "ahmadabad",
  "percentage" : 50.0,
  "state" : "Rajasthan"
}
```

43. \$skip AGGREGATION:

```
use collage
db.createCollection("stud")
db.stud.insertMany([
{
  "rIno":1,
  "name":"dharmesh",
  "stream":"MCA",
  "city":"ahmadabad",
  "percentage":50,
  "state":"Rajasthan"
},
{
  "rIno":2,
  "name":"bhautik",
  "stream":"MCA",
  "city":"Rajkot",
  "state":"gujrat",
  "percentage":90
},
{
  "rIno":3,
  "name":"hitesh",
  "stream":"MCA",
  "city":"Rajkot",
  "percentage":70,
  "state":"Rajasthan"
}
])
db.stud.aggregate({$skip:2})
```

Output:

```
{
  "_id" : ObjectId("63201122f5a060a4903dd9b7"),
  "rIno" : 3.0,
  "name" : "hitesh",
  "stream" : "MCA",
  "city" : "Rajkot",
```

```
"percentage" : 70.0,
"state" : "Rajasthan"
}
```

44. \$limit AGGREGATION:

```
use collage
db.createCollection("stud")
db.stud.insertMany([
{
  "rln":1,
  "name":"dharmesh",
  "stream":"MCA",
  "city":"ahmadabad",
  "percentage":50,
  "state":"Rajasthan"
},
{
  "rln":2,
  "name":"bhautik",
  "stream":"MCA",
  "city":"Rajkot",
  "state":"gujrat",
  "percentage":90
},
{
  "rln":3,
  "name":"hitesh",
  "stream":"MCA",
  "city":"Rajkot",
  "percentage":70,
  "state":"Rajasthan"
}
])
db.stud.aggregate({$limit:2})
```

output

```
{
  "_id" : ObjectId("63201122f5a060a4903dd9b5"),
  "rln" : 1.0,
  "name" : "dharmesh",
  "stream" : "MCA",
  "city" : "ahmadabad",
  "percentage" : 50.0,
  "state" : "Rajasthan"
}
{
  "_id" : ObjectId("63201122f5a060a4903dd9b6"),
  "rln" : 2.0,
  "name" : "bhautik",
```

```
"stream" : "MCA",  
"city" : "Rajkot",  
"state" : "gujrat",  
"percentage" : 90.0  
}
```

MONGODB DATABASE

Window 7 and php version low

45. connection.php(static data)

```
<?php  
$m= new MongoClient();  
echo "connection to database successfully";  
  
$db=$m->mydbs;  
echo "<br> database mydb is selected";  
  
$collection = $db->createCollection("mydb");  
echo "<br> collection created successfully";  
?>
```

46. insert.php

```
<?php  
$m=new MongoClient();  
echo "connection to database successfully";  
  
$db=$m->mydb;  
echo "Database mydb is selected";  
  
$collection=$db->emp;  
echo "collection created successfully";  
  
$document=array("emp"=>"MEET","salary"=>"8000");  
  
$collection->insert($document);  
echo "document inserted successfully";  
?>
```

47. delete.php

```
<?php  
$m= new MongoClient();  
echo "<br>connection to database successfully";  
  
$db=$m->mydb;  
echo "<br>database selected";  
  
$collection = $db->emp;  
echo "<br>collection selected successfully";  
  
$collection->remove(array("empnm"=>"MEET"));  
echo "<br>documents deleted successfully";
```

```
$cursor=$collection->find();  
echo "<br>Updated document";  
?>
```

48. update.php

```
<?php  
$m=new MongoClient();  
echo "connection to database sucessfully";  
  
$db=$m->mydb;  
echo "Database is selected";  
  
$collection=$db->emp;  
echo "collection created successfully";  
  
$collection->update(array("empnm"=>"hemang"),  
array('$set'=>array("empnm"=>"mital", "salary"=>9000)));  
echo "document updated successfully";  
?>
```

FORM DATABASE

48. form.php

```
<html>  
<body align="center">  
<form action="MongoConnection.php" method="post">  
<h1>Employee sheet</h1>  
<table border="2" align="center">  
<tr>  
<td>Enter employee no:-</td>  
<td><input type="text" name="no" /></td>  
</tr>  
<tr>  
<td>Enter employee name:-</td>  
<td><input type="text" name="nm" /></td>  
</tr>  
<tr>  
<td>Enter employee salary:-</td>  
<td><input type="text" name="sal" /></td>  
</tr>  
<tr>  
<td colspan="2">  
<input type="submit" name="insert" value="Insert" />  
</td>  
</tr>  
</form>  
</body>  
</html>
```

49. Mongoconneaction.php

```
<?php  
$no=$_POST['no'];  
$nm=$_POST['nm'];
```

```

$sal=$_POST['sal'];

$m = new MongoClient();
$db = $m->hns;
echo "Connection successfully";

$coll = $db->emp;
echo "Database is found is here";

    $data = array('empno' => $no,'empnm' => $nm,'salary'=> $sal);

$coll->insert($data);
echo "Insert Successfully";

header('Location:/PROGRAMS_ALL/Record/displaydata1.php');
?>

```

50. displaydata1.php

```

<?php
    $connection = new MongoClient();
    $database = $connection->selectDB('hns');
    $collection = $database->selectCollection('emp');
    $cursor = $collection->find();
    echo "<table border=1>";
    echo "<tr><th>EMPNO</th><th>NAME</th><th>SALARY</th>";
    while ($cursor->hasNext());$data = $cursor->getNext();
        echo "<tr><td>";
        echo $data['empno'];
        echo "</td><td>";
        echo $data['empnm'];
        echo "</td><td>";
        echo $data['salary'];
        echo "</td></tr>";
    endwhile;
    echo "</table>";
    echo "<a href='delete1.php'>Delete</a>";
?>

```

51. update.php

```

<html>

    <body>

<form action="" method="post">

Search employee no:- <input type="text" name="no"/><br>
New employee name:- <input type="text" name="nm"/><br>
New employee salary:- <input type="text" name="sal"/><br>

<input type="submit" name="update" value="update"/>
</form>
</body>
</html>

```

```

<?php
error_reporting(0);
$no=$_POST['no'];
$nm=$_POST['nm'];
$sal=$_POST['sal'];

    $m=new MongoClient();
    echo "<br>connection to database sucessfully";

    $db=$m->hns;
    echo "<br>Database is selected";

    $collection=$db->emp;
    echo "<br>collection created successfully";

    $collection->update(array("empno"=>$no),
    array('$set'=>array("empnm"=>$nm,"salary"=>$sal)));

    echo "document updated successfully";
echo "<br><a href='displaydata1.php'>Display</a>";
?>

```

52. delete1.php

```

<html>
    <body>

<form action="" method="POST">

Search employee no:- <input type="text" name="no1"/><br>

<input type="submit" name ="Delete" value="Delete"/>
</form>
</body>
</html>
<?php error_reporting(0);
$no = $_POST["no1"];
$m= new MongoClient();
echo "<br>connection to database sucessfully";

$db=$m->hns;
echo "<br>database selected";

$collection = $db->emp;
echo "<br>collection selected sucessfully";

$collection->remove(array("empno"=>$no));
echo "<br>documents deleted sucessfully";

$cursor =$collection->find();
echo "<br>Updated document";

echo "<br><a href='displaydata1.php'>Display</a>";

```

```
echo "<br><a href='emp_insert_textbox.php'>Insert</a>";
echo "<br><a href='update.php'>Update</a>";
?>
```

Window 10 and php version high

53.connection.php

```
<?php
$m = new MongoDB\Driver\Manager("mongodb://localhost:27017");
echo "connection to database sucessfully";

$command= new MongoDB\Driver\Command(["create" => 'student']);
echo "<br> collection created sucessfully";

$cursor =$m->executeCommand("collage",$command);
echo "<br> database mydb is selected";
?>
```

54.insert.php

```
<?php
$mongo = new MongoDB\Driver\Manager("mongodb://localhost:27017");
$bulk = new MongoDB\Driver\BulkWrite;
$doc = array(
    'id' => new MongoDB\BSON\ObjectID, #Generate MongoDB
    'name' => 'bhautik',
    'age' => 21,
    'roll_no' => 1
);
$bulk->insert($doc);
$mongo->executeBulkWrite('collage.student', $bulk);
echo "inserted data sucessfully";
?>
```

55.update.php

```
<?php
$conn = new MongoDB\Driver\Manager("mongodb://localhost:27017");
$bulk = new MongoDB\Driver\BulkWrite;

$bulk->update(
    ['_id' => new \MongoDB\BSON\ObjectID('63118891c2060f1e88001656')],
    ['$set' => ['name' => '22']]
);
$conn->executeBulkWrite('bhargav.hitesh', $bulk);
echo "update data sucessfully";
?>
```

56.delete.php

```
<?php
$conn = new MongoDB\Driver\Manager("mongodb://localhost:27017");
$bulk = new MongoDB\Driver\BulkWrite;

$bulk->delete(['name'=>'hitesh']);
$conn->executeBulkWrite('bhargav.hitesh', $bulk);
echo "delete data sucessfully";
?>
```

BLOG POST

57.blogpost.php

```
<html>
<head>
  <title>Blog Post Creator</title>
</head>
<body>
  <h1>Blog Post Creator</h1>
  <form action="blogpostconn.php" method="post">
    <h3>Title</h3>
    <p>
      <input type="text" name="title" id="title"/>
    </p>
    <h3>Content</h3>
    <textarea name="content" rows="20"></textarea>
    <p>
      <input type="submit" name="btn_submit" value="Save"/>
    </p>
  </form>
</body>
</html>
```

58.blogpostconn.php

```
<?php

try
{
  $connection = new MongoClient();
  $database = $connection->selectDB('myblogsite');
  $collection = $database->selectCollection('articles');

  $article =
  array(
    'title' => $_POST['title'],
    'content' => $_POST['content'],
    'saved_at' => new MongoDBDate() // $date
  );
  $collection->insert($article);
}

catch(MongoConnectionException $e)
{
  die("Failed to connect to database ". $e->getMessage());
}

catch(MongoException $e)
{
  die('Failed to insert data '. $e->getMessage());
}
?>
<html>
```

```

<body>
  Article saved. _id:<?php echo $article['_id'];?>.
  <a href="blogpost.php">
  do you want to Write another one then click here?
</a><br>
  <a href="displaydata.php">
  Click here for display data?
</a>
</body>
</html>

```

59.displaydata.php

```

<?php
try
{
  $connection = new MongoClient();
  $database = $connection->selectDB('myblogsites');
  $collection = $database->selectCollection('articles');
}

catch(MongoConnectionException $e)
{
  die("Failed to connect to database ". $e->getMessage());
}
$cursor = $collection->find();
?>

<?php
//while(expression):statement ..... endwhile;
while ($cursor->hasNext());$article =
$cursor->getNext();
?>
<Br>
  <?php
echo $article['title'];
?>
<br>
  <?php
echo substr($article['content'], 0,200).'.....!';
?>
<br>
<?php endwhile; ?>

```

Session (counter start and destroy)

60.sessionstar.php

```

<?php
session_start();
if(isset($_SESSION['counter']))
{
  $_SESSION['counter']+=1;
}
else
{
  $_SESSION['counter']=1;
}

```

```

}
$a="you have visited this page ".$_SESSION['counter']."time";
$b="the session is=".$_session_id();
echo $a."<br>";
echo $b;
?>

```

Output

you have visited this page 1time
the session is=s4g4v75fsn3nl1pcdmbmc4k79p

61.phpcounter.php

```

<?php
session_start();
    if(isset($_SESSION['counter']))
    {
        $_SESSION['counter']+=1;
    }
else
{
    $_SESSION['counter']=1;
}
$msg="you have visited this page  " .$_SESSION['counter'] ." time";

$msg1="The session id is ".$_session_id();
?>
<html>
<head> <title> counter</title></head>
<body>
    <?php echo ($msg); ?><br><br>
    <?php echo ($msg1); ?>
</body></html>

```

Output

you have visited this page 3 time
The session id is =s4g4v75fsn3nl1pcdmbmc4k79p

62.session_demo.php

```

<?php
// Start the session
session_start();
?>
<html>
<body>
<?php
// Set session variables
$_SESSION["user"] = "Bhautik ";
$_SESSION["city"] = " rajkot ";
$_SESSION["pass"] = "Maru Bhautik";
echo "Session variables are set.";
echo $_SESSION["user"];
echo $_SESSION["city"];
echo $_SESSION["pass"];
?>
</body></html>

```

Output

Session variables are set.Bhautik rajkot Maru Bhautik

63.session_demo_view.php

```
<?php
session_start();
?>
<html>
<body>
<?php
print_r($_SESSION);
?>
</body>
</html>
```

Output

Array ([counter] => 3 [user] => Bhautik [city] => rajkot [pass] => Maru Bhautik)

64.phpcounter_destroy.php

```
<?php
    session_start();
?>
<html>
<body>
<?php
    //remove all session variable
    session_unset();

    //destroyed the session
    session_destroy();

    echo ("counter reset");
?>
</body>
</html>
```

Output

counter reset

php counter start and destroy

65.phpcounte.php

```
<?php
    Session_start();
    if(isset($_SESSION['counter']))
    {
        $_SESSION['counter']+=1;
    }
    else
    {
        $_SESSION['counter']=1;
    }
    $msg="you have visited this page " .$_SESSION['counter'] ." time";
    //$msg1="in this program session id is ";
?>
```

```
<html>
<head>
  <title> counter</title>
</head>
<body>
  <?php echo ($msg); ?>
</body>
</html>
```

Output

you have visited this page 1 time

66.phpcounte_destroy.php

```
<?php
  Session_start();
?>
<html>
<body>
<?php
  //remove all session variable
  session_unset();
  //destroyed the session
  session_destroy();
  echo "php counter destroy";
?>
</body>
</html>
```

Output

php counter destroy

Session with database

67. emp_insert_textbox.php

```
<html>
  <body>
<form action="MongoConnection1.php" method="post">
Enter employee no:- <input type="text" name="no"/><br>
Enter employee name:- <input type="text" name="nm"/><br>
Enter employee salary:- <input type="text" name="sal"/><br>
<input type="submit" name="insert" value="Insert"/>
</form>
</body>
</html>
```

Output

Enter employee no:-

Enter employee name:-

Enter employee salary:-

68. MongoConnection.php

```
<?php
```

```

$no=$_POST['no'];
$nm=$_POST['nm'];
$sal=$_POST['sal'];
$m = new MongoClient();
$db = $m->hns;
echo "Connection successfully";
$coll = $db->emp;
echo "Database is found is here";
$data = array('empno' => $no,'empnm' => $nm,'salary'=> $sal);
$coll->insert($data);
echo "Insert Successfully";
header('Location:/PROGRAMS_ALL/Record/displaydata.php');
?>

```

Output

69. display.php

```

<?php
try
{
    $connection = new MongoClient();
    $database = $connection->selectDB('hns');
    $collection = $database->selectCollection('emp');
}

catch(MongoConnectionException $e)
{
    die("Failed to connect to database ". $e->getMessage());
}

$cursor = $collection->find();
?><?php
echo "<table border=1>";
echo "<tr><th>EMPNO</th><th>NAME</th><th>SALARY</th>";

while ($cursor->hasNext());$data = $cursor->getNext();

    echo "<tr><td>";

    echo $data['empno'];
    echo "</td><td>";
    echo $data['empnm'];
    echo "</td><td>";
    echo $data['salary'];

    echo "</td></tr>";

endwhile;
echo "</table>";
echo "<a href='delete.php'>Back</a>";
?>

```

Output

70. delete.php

```
<html>
  <body>
<form action="" method="POST">
Search employee no:- <input type="text" name="no1"/><br>
<input type="submit" name="Delete" value="Delete"/>
</form>
  </body>
</html>
<?php error_reporting(0);

$no = $_POST["no1"];
$m= new MongoClient();
echo "<br>connection to database successfully";

$db=$m->hns;
echo "<br>database selected";

$collection = $db->emp;
echo "<br>collection selected successfully";
$collection->remove(array("empno"=>$no));
echo "<br>documents deleted successfully";

$cursor =$collection->find();
echo "<br>Updated document";
echo "<br><a href='displaydata1.php'>Display</a>";
echo "<br><a href='emp_insert_textbox.php'>Insert</a>";
echo "<br><a href='update.php'>Update</a>";
?>
```

Output

71. update.php

```
<html>
  <body>
<form action="" method="post">
Search employee no:- <input type="text" name="no"/><br>
New employee name:- <input type="text" name="nm"/><br>
New employee salary:- <input type="text" name="sal"/><br>
<input type="submit" name="update" value="update"/>
</form>
  </body>
</html>
<?php
error_reporting(0);
$no=$_POST['no'];
$nm=$_POST['nm'];
$sal=$_POST['sal'];

$m=new MongoClient();
echo "<br>connection to database successfully";

$db=$m->hns;
```

```

echo "<br>Database is selected";

$collection=$db->emp;
echo "<br>collection created successfully";

$collection->update(array("empno"=>$no),
array('$set'=>array("empnm"=>$nm,"salary"=>$sal)));
echo "document updated successfully";
echo "<br><a href='displaydata1.php'>Display</a>";
?>

```

Output

Authentication

72. register.php

```

<?php
if(isset($_POST['submit']))
{
$username=$_POST['username'];
$password=$_POST['password'];
$conn = new MongoClient();

// access database
$db = $conn->hns;

// access collection
$collection = $db->login;
$data=array("username"=>$username,"password"=>$password);
$collection->insert($data);
echo "Insert Successfully";
header('Location:/auth/final.php');
}
?>
<html>
<body>
<br>
<center><h1> Registration form </h1></center>
<br>
<form action="" method="post">
<label>Username :</label>
<input type="text" Name="username">
<br>
<label>Password :</label>
<input type="password" Name="password">
<br>
<br>
<input type="submit" value="Register" name="submit">
<br>
</form>
</body>
</html>

```

Output

Registration form

Username :

Password :

73. final.php

```
<?php
session_start();
?>
<html>
<body>
<br>
<center><h1> Welcome to Login Page </h1></center>
<br>
<form name="form1" method="post" action="<?=$_SERVER["PHP_SELF"]; ?>">
<label>Username :</label>
<input type="text" Name="username">
<br>
<label>Password :</label>
<input type="password" Name="password">
<br>
<br>
<input type="submit" value="Login" name="submit">
<br>
<a href="register.php">Register</a>
</FORM>
</body>
</html>
<?php
if(isset($_POST['submit']))
{
    $username = $_POST["username"];
    $password = $_POST["password"];

    $conn = new MongoClient();
if($conn)
{    $db = $conn->hns;

    $collection = $db->login;

    $user = $collection->find(array('username'=> $username, 'password'=> $password));
foreach ($user as $obj)
    {
        $user= $obj['username'];
        $pass= $obj['password'];
    }
    if($username == $user && $password == $pass)
    {
```

```
$_SESSION['username']=$user;
header('Location:/auth/page2.php');
}
else
{
    echo 'not found' ;
}
}
}
?>
```

Output

Welcome to Login Page

Username :

Password :

[Register](#)

74. page2.php

```
<?php
session_start();
?>
<html>
<head>
<title>User Login</title>
</head>
<body>
```

```
<?php
if(isset($_SESSION['username']))
{
    echo "Welcome: ".$_SESSION['username'];
}
else
{
    header('Location:/auth/final.php');
}
?>
```

```
<h1>
Congratulation! You have logged into password protected page. <a href="logout.php">Click here</a> to
Logout
</h1>
</body>
</html>
```

Output

74. logout.php

```
<?php
session_start();
unset($_SESSION["username"]);
```

```
header("Location:/auth/final.php");
?>
```

Output

Window 10 Dynamic CRUD

75. register.php

```
<html>
  <body align="center">

  <form action="connection.php" method="POST">
  <h1>Employee sheet</h1>
  <table border="2" align="center">
  <tr>
  <td>Enter employee no:-</td>
  <td> <input type="text" name="no"/></td>
  </tr>
  <tr>
  <td>Enter employee name:-</td>
  <td> <input type="text" name="nm"/></td>
  </tr>
  <tr>
  <td>Enter employee salary:-</td>
  <td> <input type="text" name="sal"/></td>
  </tr>
  <tr>
  <td colspan="2">
  <input type="submit" name="insert" value="Insert"/>
  </td>
  </tr>
  </form>
  </body>
</html>
```

Output

Employee sheet

Enter employee no:-	<input type="text"/>
Enter employee name:-	<input type="text"/>
Enter employee salary:-	<input type="text"/>
<input type="submit" value="Insert"/>	

76. connection.php

```
<?php
error_reporting(0);
$no=$_POST['no'];
$nm=$_POST['nm'];
$sal=$_POST['sal'];

$m = new MongoDB\Driver\Manager('mongodb://localhost:27017');
```

```

//$command= new MongoDB\Driver\Command(["create" => 'e2']);
echo "<br> collection created successfully";

//$cursor =$m->executeCommand("emp1",$command);
echo "<br> database mydb is selected";

    $bulk = new MongoDB\Driver\BulkWrite;

    $doc = array('empno'=>$no,
        'empnm'=>$nm,
        'salary'=>$sal);

$bulk->insert($doc);

$result = $m->executeBulkWrite('emp1.e2', $bulk);
echo "inserted successfully...";
?>

```

Output

Collection created successfully
database mydb is selected inserted successfully...

77. displaydata.php

```

<?php
    $conn = new MongoDB\Driver\Manager("mongodb://localhost:27017");
    $filter = [];
    $option = [];

    $read = new MongoDB\Driver\Query($filter, $option);

    $all_users = $conn->executeQuery("emp1.e2", $read);

    echo "Display data:\n";
    foreach ($all_users as $user)
    {
        //echo nl2br($user->empno.' ' . $user->empnm.' has following roles:' . "\n");
        echo $user->empno;
        echo $user->empnm;
        echo $user->salary;
        echo "<br>";
    }
?>

```

Output

Display data:
1bhautik60000
2hitesh90000

78. update.php

```

<html>

```

Comment [MB1]:

```
<body align="center">

<form action="" method="POST">
<h1>Employee sheet</h1>
<table border="2" align="center">
<tr>
<td>Enter employee no:-</td>
<td> <input type="text" name="no" /></td>
</tr>
<tr>
<td>Enter employee name:-</td>
<td> <input type="text" name="nm" /></td>
</tr>
<tr>
<td>Enter employee salary:-</td>
<td> <input type="text" name="sal" /></td>
</tr>
<tr>
<td colspan="2">
<input type="submit" name="update" value="update" />
</td>
</tr>
</form>
</body>

</html>

<?php
$no = $_POST['no'];
$nm = $_POST['nm'];
$sal = $_POST['sal'];
$conn = new MongoDB\Driver\Manager("mongodb://localhost:27017");
$update = new MongoDB\Driver\BulkWrite();
$update->update(
['empno' => $no],
['$set' => ['empnm' => $nm, 'salary' => $sal]],
['multi' => false, 'upsert' => true]
);
$result = $conn->executeBulkWrite("emp1.e2", $update);

if ($result) {
echo "Record updated successfully \n";
}
```

Employee sheet

Record updated successfully

Enter employee no:-	<input type="text"/>
Enter employee name:-	<input type="text"/>
Enter employee salary:-	<input type="text"/>
<input type="submit" value="update"/>	

79. delete.php

```
<html>
<body align="center">

  <form action="" method="POST">
    <h1>Employee sheet</h1>
    <table border="2" align="center">
      <tr>
        <td>Enter employee no:-</td>
        <td><input type="text" name="no" /></td>
      </tr>

      <td colspan="2">
        <input type="submit" name="insert" value="Insert" />
      </td>
    </tr>
  </form>
</body>
</html>
<?php
error_reporting(0);
$no = $_POST['no'];
$conn = new MongoDB\Driver\Manager("mongodb://localhost:27017");
$deletes = new MongoDB\Driver\BulkWrite();
$deletes->delete(
    ['empno' => $no]
);

$result = $conn->executeBulkWrite("emp1.e2", $deletes);

if ($result) {
    echo "Record deleted successfully \n";
}

?>
```

Output

Employee sheet

Enter employee no:-	<input type="text"/>
<input type="submit" value="Insert"/>	<input type="text"/>

<https://roytuts.com/mongodb-php-7-crud-example/>

