

Covid – 19

Mongo DB queries

```
C:\Program Files\MongoDB\Server\5.0\bin\mongo.exe
MongoDB shell version v5.0.7
connecting to: mongodb://127.0.0.1:27017/?compressors=disabled&gssapiServiceName=mongodb
Implicit session: session { "id" : UUID("15312b40-0918-4b7c-a1b6-f45119ed50a7") }
MongoDB server version: 5.0.7
=====
Warning: the "mongo" shell has been superseded by "mongosh",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.
For installation instructions, see
https://docs.mongodb.com/mongodb-shell/install/
=====
The server generated these startup warnings when booting:
 2022-04-16T22:59:22.258+05:30: Access control is not enabled for the database. Read and write access to data and configuration is unrestricted
---
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()
---
> use covid_19
switched to db covid_19
>
```

1. db.covid19.aggregate({\$group:{_id:"\$State",max:{\$max:"\$Deaths"}}});

```
> db.covid19.aggregate({$group:{_id:"$State",max:{$max:"$Deaths"}}});
{ "_id" : "Andhra Pradesh", "max" : "9904" }
{ "_id" : "Haryana", "max" : "975" }
{ "_id" : "Tamil Nadu", "max" : "9984" }
{ "_id" : "Chhattisgarh", "max" : "9950" }
{ "_id" : "Andaman and Nicobar Islands", "max" : "98" }
{ "_id" : "Telangana", "max" : "996" }
{ "_id" : "West Bengal", "max" : "9993" }
{ "_id" : "Manipur", "max" : "998" }
{ "_id" : "Arunachal Pradesh", "max" : "98" }
{ "_id" : "Mizoram", "max" : "98" }
{ "_id" : "Uttar Pradesh", "max" : "9997" }
{ "_id" : "Bihar", "max" : "996" }
{ "_id" : "Ladakh", "max" : "98" }
{ "_id" : "Rajasthan", "max" : "992" }
{ "_id" : "Meghalaya", "max" : "988" }
{ "_id" : "Dadra and Nagar Haveli and Daman and Diu", "max" : "4" }
{ "_id" : "Maharashtra***", "max" : "130753" }
{ "_id" : "Maharashtra", "max" : "99512" }
{ "_id" : "Himanchal Pradesh", "max" : "3507" }
{ "_id" : "Goa", "max" : "993" }
Type "it" for more
>
```

2. db.covid19.find({Deaths:{\$gt:"1000"} });

```
> db.covid19.find({Deaths:{$gt:"1000"}});
{
  "_id" : ObjectId("625e7b9f03dcf1ca4414316f"),
  "Sno" : "281",
  "Date" : "22-03-2020",
  "Time" : "6:00 PM",
  "State" : "Maharashtra",
  "ConfirmedIndianNational" : "64",
  "ConfirmedForeignNational" : "3",
  "Cured" : "0",
  "Deaths" : "2",
  "Confirmed" : "67"
},
{
  "_id" : ObjectId("625e7b9f03dcf1ca44143186"),
  "Sno" : "304",
  "Date" : "23-03-2020",
  "Time" : "6:00 PM",
  "State" : "Maharashtra",
  "ConfirmedIndianNational" : "71",
  "ConfirmedForeignNational" : "3",
  "Cured" : "0",
  "Deaths" : "2",
  "Confirmed" : "74"
},
{
  "_id" : ObjectId("625e7b9f03dcf1ca4414319d"),
  "Sno" : "327",
  "Date" : "24-03-2020",
  "Time" : "6:00 PM",
  "State" : "Maharashtra",
  "ConfirmedIndianNational" : "86",
  "ConfirmedForeignNational" : "3",
  "Cured" : "0",
  "Deaths" : "2",
  "Confirmed" : "89"
},
{
  "_id" : ObjectId("625e7b9f03dcf1ca441431b5"),
  "Sno" : "351",
  "Date" : "25-03-2020",
  "Time" : "6:00 PM",
  "State" : "Maharashtra",
  "ConfirmedIndianNational" : "125",
  "ConfirmedForeignNational" : "3",
  "Cured" : "1",
  "Deaths" : "3",
  "Confirmed" : "128"
},
{
  "_id" : ObjectId("625e7b9f03dcf1ca441431cb"),
  "Sno" : "373",
  "Date" : "26-03-2020",
  "Time" : "6:00 PM",
  "State" : "Gujarat",
  "ConfirmedIndianNational" : "42",
  "ConfirmedForeignNational" : "1",
  "Cured" : "0",
  "Deaths" : "3",
  "Confirmed" : "43"
},
{
  "_id" : ObjectId("625e7b9f03dcf1ca441431cf"),
  "Sno" : "377",
  "Date" : "26-03-2020",
  "Time" : "6:00 PM",
  "State" : "Karnataka",
  "ConfirmedIndianNational" : "55",
  "ConfirmedForeignNational" : "0",
  "Cured" : "2",
  "Deaths" : "2",
  "Confirmed" : "55"
},
{
  "_id" : ObjectId("625e7b9f03dcf1ca441431d3"),
  "Sno" : "381",
  "Date" : "26-03-2020",
  "Time" : "6:00 PM",
  "State" : "Maharashtra",
  "ConfirmedIndianNational" : "121",
  "ConfirmedForeignNational" : "3",
  "Cured" : "1",
  "Deaths" : "3",
  "Confirmed" : "124"
},
{
  "_id" : ObjectId("625e7b9f03dcf1ca441431e6"),
  "Sno" : "400",
  "Date" : "27-03-2020",
  "Time" : "10:00 AM",
  "State" : "Gujarat",
  "ConfirmedIndianNational" : "42",
  "ConfirmedForeignNational" : "1",
  "Cured" : "0",
  "Deaths" : "3",
  "Confirmed" : "43"
},
{
  "_id" : ObjectId("625e7b9f03dcf1ca441431ea"),
  "Sno" : "404",
  "Date" : "27-03-2020",
  "Time" : "10:00 AM",
  "State" : "Karnataka",
  "ConfirmedIndianNational" : "55",
  "ConfirmedForeignNational" : "0",
  "Cured" : "3",
  "Deaths" : "2",
  "Confirmed" : "55"
},
{
  "_id" : ObjectId("625e7b9f03dcf1ca441431ee"),
  "Sno" : "408",
  "Date" : "27-03-2020",
  "Time" : "10:00 AM",
  "State" : "Maharashtra",
  "ConfirmedIndianNational" : "127",
  "ConfirmedForeignNational" : "3",
  "Cured" : "15",
  "Deaths" : "4",
  "Confirmed" : "130"
},
{
  "_id" : ObjectId("625e7b9f03dcf1ca44143201"),
  "Sno" : "427",
  "Date" : "28-03-2020",
  "Time" : "6:00 PM",
  "State" : "Gujarat",
  "ConfirmedIndianNational" : "44",
  "ConfirmedForeignNational" : "1",
  "Cured" : "0",
  "Deaths" : "3",
  "Confirmed" : "45"
},
{
  "_id" : ObjectId("625e7b9f03dcf1ca44143205"),
  "Sno" : "431",
  "Date" : "28-03-2020",
  "Time" : "6:00 PM",
  "State" : "Karnataka",
  "ConfirmedIndianNational" : "55",
  "ConfirmedForeignNational" : "0",
  "Cured" : "3",
  "Deaths" : "2",
  "Confirmed" : "55"
},
{
  "_id" : ObjectId("625e7b9f03dcf1ca44143208"),
  "Sno" : "434",
  "Date" : "28-03-2020",
  "Time" : "6:00 PM",
  "State" : "Madhya Pradesh",
  "ConfirmedIndianNational" : "30",
  "ConfirmedForeignNational" : "0",
  "Cured" : "0",
  "Deaths" : "2",
  "Confirmed" : "30"
},
{
  "_id" : ObjectId("625e7b9f03dcf1ca44143209"),
  "Sno" : "435",
  "Date" : "28-03-2020",
  "Time" : "6:00 PM",
  "State" : "Maharashtra",
  "ConfirmedIndianNational" : "177",
  "ConfirmedForeignNational" : "3",
  "Cured" : "25",
  "Deaths" : "5",
  "Confirmed" : "180"
},
{
  "_id" : ObjectId("625e7b9f03dcf1ca4414321a"),
  "Sno" : "452",
  "Date" : "29-03-2020",
  "Time" : "7:30 PM",
  "State" : "Delhi",
  "Cured" : "6",
  "Deaths" : "2",
  "Confirmed" : "49"
}
```

3. db.covid19.find().pretty();

```
> db.covid19.find().pretty();
{
  "_id" : ObjectId("625e7b9f03dcf1ca44143057"),
  "Sno" : "1",
  "Date" : "30-01-2020",
  "Time" : "6:00 PM",
  "State" : "Kerala",
  "ConfirmedIndianNational" : "1",
  "ConfirmedForeignNational" : "0",
  "Cured" : "0",
  "Deaths" : "0",
  "Confirmed" : "1"
},
{
  "_id" : ObjectId("625e7b9f03dcf1ca44143058"),
  "Sno" : "2",
  "Date" : "31-01-2020",
  "Time" : "6:00 PM",
  "State" : "Kerala",
  "ConfirmedIndianNational" : "1",
  "ConfirmedForeignNational" : "0",
  "Cured" : "0",
  "Deaths" : "0",
  "Confirmed" : "1"
},
{
  "_id" : ObjectId("625e7b9f03dcf1ca44143059"),
  "Sno" : "3",
  "Date" : "01-02-2020",
  "Time" : "6:00 PM",
  "State" : "Kerala",
  "ConfirmedIndianNational" : "2",
  "ConfirmedForeignNational" : "0",
  "Cured" : "0",
  "Deaths" : "0",
  "Confirmed" : "2"
}
```

4. var myc = db.covid19.find({});

myc;

```
> var myc = db.covid19.find({});
> myc;
[{"_id": ObjectId("625e7b9f03dcf1ca44143057"), "Sno": "1", "Date": "30-01-2020", "Time": "6:00 PM", "State": "Kerala", "ConfirmedIndianNational": "1", "ConfirmedForeignNational": "0", "Cured": "0", "Deaths": "0", "Confirmed": "1"}, {"_id": ObjectId("625e7b9f03dcf1ca44143058"), "Sno": "2", "Date": "31-01-2020", "Time": "6:00 PM", "State": "Kerala", "ConfirmedIndianNational": "1", "ConfirmedForeignNational": "0", "Cured": "0", "Deaths": "0", "Confirmed": "1"}, {"_id": ObjectId("625e7b9f03dcf1ca44143059"), "Sno": "3", "Date": "01-02-2020", "Time": "6:00 PM", "State": "Kerala", "ConfirmedIndianNational": "2", "ConfirmedForeignNational": "0", "Cured": "0", "Deaths": "0", "Confirmed": "2"}, {"_id": ObjectId("625e7b9f03dcf1ca4414305a"), "Sno": "4", "Date": "02-02-2020", "Time": "6:00 PM", "State": "Kerala", "ConfirmedIndianNational": "3", "ConfirmedForeignNational": "0", "Cured": "0", "Deaths": "0", "Confirmed": "3"}, {"_id": ObjectId("625e7b9f03dcf1ca4414305b"), "Sno": "5", "Date": "03-02-2020", "Time": "6:00 PM", "State": "Kerala", "ConfirmedIndianNational": "3", "ConfirmedForeignNational": "0", "Cured": "0", "Deaths": "0", "Confirmed": "3"}, {"_id": ObjectId("625e7b9f03dcf1ca4414305c"), "Sno": "6", "Date": "04-02-2020", "Time": "6:00 PM", "State": "Kerala", "ConfirmedIndianNational": "3", "ConfirmedForeignNational": "0", "Cured": "0", "Deaths": "0", "Confirmed": "3"}, {"_id": ObjectId("625e7b9f03dcf1ca4414305d"), "Sno": "7", "Date": "05-02-2020", "Time": "6:00 PM", "State": "Kerala", "ConfirmedIndianNational": "3", "ConfirmedForeignNational": "0", "Cured": "0", "Deaths": "0", "Confirmed": "3"}, {"_id": ObjectId("625e7b9f03dcf1ca4414305e"), "Sno": "8", "Date": "06-02-2020", "Time": "6:00 PM", "State": "Kerala", "ConfirmedIndianNational": "3", "ConfirmedForeignNational": "0", "Cured": "0", "Deaths": "0", "Confirmed": "3"}, {"_id": ObjectId("625e7b9f03dcf1ca4414305f"), "Sno": "9", "Date": "07-02-2020", "Time": "6:00 PM", "State": "Kerala", "ConfirmedIndianNational": "3", "ConfirmedForeignNational": "0", "Cured": "0", "Deaths": "0", "Confirmed": "3"}, {"_id": ObjectId("625e7b9f03dcf1ca44143060"), "Sno": "10", "Date": "08-02-2020", "Time": "6:00 PM", "State": "Kerala", "ConfirmedIndianNational": "3", "ConfirmedForeignNational": "0", "Cured": "0", "Deaths": "0", "Confirmed": "3"}, {"_id": ObjectId("625e7b9f03dcf1ca44143061"), "Sno": "11", "Date": "09-02-2020", "Time": "6:00 PM", "State": "Kerala", "ConfirmedIndianNational": "3", "ConfirmedForeignNational": "0", "Cured": "0", "Deaths": "0", "Confirmed": "3"}, {"_id": ObjectId("625e7b9f03dcf1ca44143062"), "Sno": "12", "Date": "10-02-2020", "Time": "6:00 PM", "State": "Kerala", "ConfirmedIndianNational": "3", "ConfirmedForeignNational": "0", "Cured": "0", "Deaths": "0", "Confirmed": "3"}]
```

5. var myc = db.covid19.find({});

var myrec;

```
myc.forEach(function(myrec) { print("The STATE is: " + myrec.State);});
```

```
The STATE is: Puducherry
The STATE is: Jharkhand
The STATE is: Nagaland
The STATE is: Sikkim
The STATE is: Tamil Nadu
The STATE is: Tlengana
The STATE is: Tripura
The STATE is: Uttarakhand
The STATE is: Uttar Pradesh
The STATE is: West Bengal
The STATE is: Andaman and Nicobar Islands
The STATE is: Andhra Pradesh
The STATE is: Arunachal Pradesh
The STATE is: Assam
The STATE is: Bihar
The STATE is: Chandigarh
The STATE is: Chhattisgarh
The STATE is: Dadra and Nagar Haveli and Daman and Diu
The STATE is: Delhi
The STATE is: Goa
The STATE is: Gujarat
The STATE is: Haryana
The STATE is: Himachal Pradesh
The STATE is: Jammu and Kashmir
The STATE is: Jharkhand
The STATE is: Karnataka
The STATE is: Kerala
The STATE is: Ladakh
The STATE is: Lakshadweep
The STATE is: Madhya Pradesh
The STATE is: Maharashtra
The STATE is: Manipur
The STATE is: Meghalaya
The STATE is: Mizoram
The STATE is: Nagaland
The STATE is: Odisha
The STATE is: Puducherry
The STATE is: Punjab
The STATE is: Rajasthan
The STATE is: Sikkim
The STATE is: Tamil Nadu
The STATE is: Telangana
The STATE is: Tlengana
The STATE is: Tripura
```

6. db.covid.find({Deaths:{\$gt:"1000"}}).skip(10).limit(5)

```
> db.covid.find({Deaths:{$gt:"1000"}}).skip(10).limit(5)
{
  "_id" : ObjectId("625e7aa3946da45c8ec7e786"),
  "Sno" : "427",
  "Date" : "28-03-2020",
  "Time" : "6:00 PM",
  "State" : "Gujarat",
  "ConfirmedIndianNational" : "44",
  "ConfirmedForeignNational" : "1",
  "Cured" : "0",
  "Deaths" : "3",
  "Confirmed" : "45"
}
{
  "_id" : ObjectId("625e7aa3946da45c8ec7e78a"),
  "Sno" : "431",
  "Date" : "28-03-2020",
  "Time" : "6:00 PM",
  "State" : "Karnataka",
  "ConfirmedIndianNational" : "55",
  "ConfirmedForeignNational" : "0",
  "Cured" : "3",
  "Deaths" : "2",
  "Confirmed" : "55"
}
{
  "_id" : ObjectId("625e7aa3946da45c8ec7e78d"),
  "Sno" : "434",
  "Date" : "28-03-2020",
  "Time" : "6:00 PM",
  "State" : "Madhya Pradesh",
  "ConfirmedIndianNational" : "30",
  "ConfirmedForeignNational" : "0",
  "Cured" : "0",
  "Deaths" : "2",
  "Confirmed" : "30"
}
{
  "_id" : ObjectId("625e7aa3946da45c8ec7e78e"),
  "Sno" : "435",
  "Date" : "28-03-2020",
  "Time" : "6:00 PM",
  "State" : "Maharashtra",
  "ConfirmedIndianNational" : "177",
  "ConfirmedForeignNational" : "3",
  "Cured" : "25",
  "Deaths" : "5",
  "Confirmed" : "180"
}
{
  "_id" : ObjectId("625e7aa3946da45c8ec7e79f"),
  "Sno" : "452",
  "Date" : "29-03-2020",
  "Time" : "7:30 PM",
  "State" : "Delhi",
  "Cured" : "6",
  "Deaths" : "2",
  "Confirmed" : "49"
}
```

7. db.covid.find({State:/^K/}).pretty()

```
> use covid19;
switched to db covid19
> db.covid.find({State:/^K/}).pretty()
{
  "_id" : ObjectId("625e7aa3946da45c8ec7e5dc"),
  "Sno" : "1",
  "Date" : "30-01-2020",
  "Time" : "6:00 PM",
  "State" : "Kerala",
  "ConfirmedIndianNational" : "1",
  "ConfirmedForeignNational" : "0",
  "Cured" : "0",
  "Deaths" : "0",
  "Confirmed" : "1"
}
{
  "_id" : ObjectId("625e7aa3946da45c8ec7e5dd"),
  "Sno" : "2",
  "Date" : "31-01-2020",
  "Time" : "6:00 PM",
  "State" : "Kerala",
  "ConfirmedIndianNational" : "1",
  "ConfirmedForeignNational" : "0",
  "Cured" : "0",
  "Deaths" : "0",
  "Confirmed" : "1"
}
{
  "_id" : ObjectId("625e7aa3946da45c8ec7e5de"),
  "Sno" : "3",
  "Date" : "01-02-2020",
  "Time" : "6:00 PM",
  "State" : "Kerala",
  "ConfirmedIndianNational" : "2",
  "ConfirmedForeignNational" : "0",
  "Cured" : "0",
  "Deaths" : "0",
  "Confirmed" : "2"
}
{
  "_id" : ObjectId("625e7aa3946da45c8ec7e5df"),
  "Sno" : "4",
  "Date" : "02-02-2020",
  "Time" : "6:00 PM",
  "State" : "Kerala",
  "ConfirmedIndianNational" : "3",
  "ConfirmedForeignNational" : "0",
  "Cured" : "0",
  "Deaths" : "0"
```

```
8. var map = function(){ emit(this.State,thisConfirmed);}
var reduce = function(key,values){ return Array.sum(values);}
db.covid.mapReduce(map,reduce,{out:"NofConfirmed",query:{Date:"25-08-2020"}});
db.NofConfirmed.find();
```

```
> var map = function(){ emit(this.State,thisConfirmed);}
> var reduce = function(key,values){ return Array.sum(values);}
> db.covid.mapReduce(map,reduce,{out:"NofConfirmed",query:{Date:"25-08-2020"}});
{ "result" : "NofConfirmed", "ok" : 1 }
> db.NofConfirmed.find();
{ "_id" : "Manipur", "value" : "5362" }
{ "_id" : "Meghalaya", "value" : "1976" }
{ "_id" : "Kerala", "value" : "59504" }
{ "_id" : "Himachal Pradesh", "value" : "5101" }
{ "_id" : "Odisha", "value" : "81479" }
{ "_id" : "Maharashtra", "value" : "693398" }
{ "_id" : "Goa", "value" : "14138" }
{ "_id" : "Puducherry", "value" : "10859" }
{ "_id" : "Chhattisgarh", "value" : "22054" }
{ "_id" : "Chandigarh", "value" : "3035" }
{ "_id" : "Tamil Nadu", "value" : "385352" }
{ "_id" : "Bihar", "value" : "123198" }
{ "_id" : "Arunachal Pradesh", "value" : "3312" }
{ "_id" : "Mizoram", "value" : "953" }
{ "_id" : "West Bengal", "value" : "141837" }
{ "_id" : "Uttarakhand", "value" : "15529" }
{ "_id" : "Rajasthan", "value" : "71955" }
{ "_id" : "Assam", "value" : "92619" }
{ "_id" : "Madhya Pradesh", "value" : "54421" }
{ "_id" : "Sikkim", "value" : "1446" }
Type "it" for more
>
```

```
9. db.covid.aggregate([{$match:{Time:"6:00 PM"}},{$count:"Total entries at 6 pm"}]);
```

```
> db.covid.aggregate([{$match:{Time:"6:00 PM"}},{$count:"Total entries at 6 pm"}]);
{ "Total entries at 6 pm" : 599 }
>
```

```
10. db.covid.aggregate( [
```

```
  {
    $set: {
      tdeaths: { $sum: "$Deaths" },
      tConfirmed: { $sum: "$Confirmed" }
    }
  },
  {
    $set: {
```

```
    total: { $subtract: ["$tConfirmed ","$tdeaths ",] }  
}  
];
```

```
11. db.covid_19.find().forEach(function(doc) {delete doc[""]; db.covid_19.deleteMany  
    (doc);});
```

```
[covid_19> db.covid_19.find().forEach(function(doc) {delete doc[""]; db.covid_19.deleteMany (doc);});  
  
covid_19>  
  
covid_19>  
  
[covid_19> db.covid_19.find();
```

12. db.covid_19.getIndexes();

```
Type "it" for more
[covid_19> db.covid_19.getIndexes();
[ { v: 2, key: { _id: 1 }, name: '_id_' } ]
covid_19> ]
```

13. db.covid_19.find({Deaths:"10"});

```
covid_19> db.covid_19.find({Deaths:"10"});
[
  {
    _id: ObjectId("625d9d97d60eb6637b7ca29b"),
    Sno: '628',
    Datee: '04-04-2020',
    Timee: '6:00 PM',
    State: 'Gujarat',
    Cured: '14',
    Deaths: '10',
    Confirmed: '105'
  },
  {
    _id: ObjectId("625d9d97d60eb6637b7ca3a0"),
    Sno: '889',
    Datee: '12-04-2020',
    Timee: '5:00 PM',
    State: 'Tamil Nadu',
    Cured: '44',
    Deaths: '10',
    Confirmed: '969'
  },
  {
    _id: ObjectId("625d9d97d60eb6637b7ca449"),
    Sno: '1058',
    Datee: '17-04-2020',
    Timee: '5:00 PM',
    State: 'West Bengal',
    Cured: '51',
    Deaths: '10',
    Confirmed: '256'
  },
  {
    _id: ObjectId("625d9d97d60eb6637b7ca46a"),
    Sno: '1091',
    Datee: '18-04-2020',
    Timee: '5:00 PM',
    State: 'West Bengal',
    Cured: '55',
    Deaths: '10',
    Confirmed: '287'
  },
  {
    _id: ObjectId("625d9d97d60eb6637b7ca73e"),
    Sno: '1815',
    Datee: '11-05-2020',
    Timee: '8:00 AM',
    State: 'Haryana',
    Cured: '300',
    Deaths: '10',
    Confirmed: '703'
  },
  {
    _id: ObjectId("625d9d97d60eb6637b7ca761"),
    Sno: '1850',
    Datee: '12-05-2020',
    Timee: '8:00 AM',
    State: 'Jammu and Kashmir',
    Cured: '1427'
  }
]
```

14. db.covid_19.aggregate([{\$match:{State:"Kerala"}},{\$count:"Total entries of kerala"}]);

```
[covid_19> db.covid_19.aggregate([{$match:{State:"Kerala"}},{$count:"Total entries of kerala"}]);
[ { 'Total entries of kerala': 560 } ]
covid_19> ]
```

```
15. db.covid_19.aggregate([{$group : {_id : "$State"}]});
```

```
covid_19> db.covid_19.aggregate( [ { $group : { _id : "$State" } } ] )
[
  { _id: 'West Bengal' },
  { _id: 'Chandigarh' },
  { _id: 'Gujarat' },
  { _id: 'Madhya Pradesh' },
  { _id: 'Manipur' },
  { _id: 'Mizoram' },
  { _id: 'Andaman and Nicobar Islands' },
  { _id: 'Assam' },
  { _id: 'Haryana' },
  { _id: 'Nagaland' },
  { _id: 'Meghalaya' },
  { _id: 'Uttarakhand' },
  { _id: 'Dadra and Nagar Haveli and Daman and Diu' },
  { _id: 'Sikkim' },
  { _id: 'Madhya Pradesh***' },
  { _id: 'Himachal Pradesh' },
  { _id: 'Karanataka' },
  { _id: 'Maharashtra***' },
  { _id: 'Bihar' },
  { _id: 'Ladakh' }
]
Type "it" for more
covid_19> it
[
  { _id: 'Lakshadweep' },
  { _id: 'Goa' },
  { _id: 'Rajasthan' },
  { _id: 'Chhattisgarh' },
  { _id: 'Tamil Nadu' },
  { _id: 'Kerala' },
  { _id: 'Odisha' },
  { _id: 'Maharashtra' },
  { _id: 'Arunachal Pradesh' },
  { _id: 'Puducherry' },
  { _id: 'Tripura' },
  { _id: 'Himachal Pradesh' },
  { _id: 'Jharkhand' },
  { _id: 'Telangana' },
  { _id: 'Andhra Pradesh' },
  { _id: 'Uttar Pradesh' },
  { _id: 'Delhi' },
  { _id: 'Jammu and Kashmir' },
  { _id: 'Karnataka' },
  { _id: 'Punjab' }
]
Type "it" for more
covid_19> ||
```

```
16. var map = function(){ emit(this.Date,this.Confirmed);}
```

```
var reduce = function(key,values){ return Array.sum(values);}
```

```
db.covid.mapReduce(map,reduce,{out:"Total",query:{State:"Goa"}},{});
```

```
db.Total.find();
```

```
result : total , 0K + 1 }

db.Total.find();
" _id" : "16-04-2021" , "value" : "64572" }
" _id" : "25-05-2021" , "value" : "147861" }
" _id" : "06-02-2021" , "value" : "53773" }
" _id" : "08-06-2020" , "value" : "300" }
" _id" : "04-01-2021" , "value" : "51295" }
" _id" : "09-07-2020" , "value" : "2039" }
" _id" : "28-07-2020" , "value" : "5119" }
" _id" : "06-05-2021" , "value" : "104398" }
" _id" : "18-08-2020" , "value" : "11994" }
" _id" : "08-08-2020" , "value" : "7947" }
" _id" : "06-12-2020" , "value" : "48574" }
" _id" : "31-03-2021" , "value" : "57839" }
" _id" : "02-11-2020" , "value" : "43768" }
" _id" : "24-02-2021" , "value" : "54648" }
" _id" : "25-04-2021" , "value" : "75184" }
" _id" : "23-06-2021" , "value" : "164957" }
" _id" : "02-05-2021" , "value" : "93355" }
" _id" : "08-02-2021" , "value" : "53880" }
" _id" : "21-02-2021" , "value" : "54523" }
" _id" : "20-04-2020" , "value" : "7" }

type "it" for more
```

17. db.covid.count({Deaths:"0"});

```
> db.covid.count({Deaths:"0"});
1654
>
```

18. db.covid.aggregate({\$group:{_id:"\$State",minDeaths:{\$min:"\$Deaths"}}});

```
db.covid.aggregate({$group:{_id:"$State",minDeaths:{$min:"$Deaths"}}});
" _id" : "Meghalaya" , "minDeaths" : "0" }
" _id" : "Kerala" , "minDeaths" : "0" }
" _id" : "Tamil Nadu" , "minDeaths" : "0" }
" _id" : "Andaman and Nicobar Islands" , "minDeaths" : "0" }
" _id" : "Telangana" , "minDeaths" : "0" }
" _id" : "Bihar" , "minDeaths" : "1" }
" _id" : "Manipur" , "minDeaths" : "0" }
" _id" : "West Bengal" , "minDeaths" : "0" }
" _id" : "Uttar Pradesh" , "minDeaths" : "0" }
" _id" : "Arunachal Pradesh" , "minDeaths" : "0" }
" _id" : "Dadra and Nagar Haveli and Daman and Diu" , "minDeaths" : "0" }
" _id" : "Jammu and Kashmir" , "minDeaths" : "0" }
" _id" : "Himachal Pradesh" , "minDeaths" : "0" }
" _id" : "Maharashtra" , "minDeaths" : "0" }
" _id" : "Goa" , "minDeaths" : "0" }
" _id" : "Chhattisgarh" , "minDeaths" : "0" }
" _id" : "Sikkim" , "minDeaths" : "0" }
" _id" : "Himachal Pradesh" , "minDeaths" : "3507" }
" _id" : "Mizoram" , "minDeaths" : "0" }
" _id" : "Ladakh" , "minDeaths" : "0" }

type "it" for more
```

```

19. var map = function(){ emit(this.Date,this.Deaths);}

var reduce = function(key,values){ return Array.sum(values);}

db.covid.mapReduce(map,reduce,{out:"DeathsTotal",query:{State:"Kerala"}});

db. DeathsTotal.find();

```

```

> db.covid.mapReduce(map,reduce,{out:"DeathsTotal",query:{State:"Kerala"}});
{
  "result" : "DeathsTotal", "ok" : 1
}
> db. DeathsTotal.find();
{
  "_id" : "05-11-2020", "value" : "1587"
}
{
  "_id" : "22-04-2020", "value" : "3"
}
{
  "_id" : "18-02-2021", "value" : "4032"
}
{
  "_id" : "15-01-2021", "value" : "3392"
}
{
  "_id" : "28-04-2021", "value" : "5170"
}
{
  "_id" : "23-08-2020", "value" : "218"
}
{
  "_id" : "18-01-2021", "value" : "3463"
}
{
  "_id" : "11-04-2020", "value" : "2"
}
{
  "_id" : "08-04-2021", "value" : "4710"
}
{
  "_id" : "03-09-2020", "value" : "305"
}
{
  "_id" : "04-03-2021", "value" : "4241"
}
{
  "_id" : "20-10-2020", "value" : "1182"
}
{
  "_id" : "23-04-2021", "value" : "5028"
}
{
  "_id" : "27-08-2020", "value" : "257"
}
{
  "_id" : "22-02-2020", "value" : "0"
}
{
  "_id" : "13-09-2020", "value" : "425"
}
{
  "_id" : "01-06-2020", "value" : "9"
}
{
  "_id" : "16-05-2021", "value" : "6339"
}
{
  "_id" : "27-05-2021", "value" : "7882"
}
{
  "_id" : "25-08-2020", "value" : "234"
}
Type "it" for more
>

```

20. db.covid_19.find({Deaths:{\$lt:"5"});

```

covid_19> db.covid_19.find({Deaths:{$lt:"5"}});
{
  "_id": ObjectId("625d9d97d68eb6637b7ca02b"),
  "Sno": "1",
  "Date": "30-01-2020",
  "Time": "6:00 PM",
  "State": "Kerala",
  "ConfirmedIndianNational": "1",
  "ConfirmedForeignNational": "0",
  "Cured": "0",
  "Deaths": "0",
  "Confirmed": "1"
},
{
  "_id": ObjectId("625d9d97d68eb6637b7ca02c"),
  "Sno": "2",
  "Date": "31-01-2020",
  "Time": "6:00 PM",
  "State": "Kerala",
  "ConfirmedIndianNational": "1",
  "ConfirmedForeignNational": "0",
  "Cured": "0",
  "Deaths": "0",
  "Confirmed": "1"
},
{
  "_id": ObjectId("625d9d97d68eb6637b7ca02d"),
  "Sno": "3",
  "Date": "01-02-2020",
  "Time": "6:00 PM",
  "State": "Kerala",
  "ConfirmedIndianNational": "2",
  "ConfirmedForeignNational": "0",
  "Cured": "0",
  "Deaths": "0",
  "Confirmed": "2"
},
{
  "_id": ObjectId("625d9d97d68eb6637b7ca02e"),
  "Sno": "4",
  "Date": "02-02-2020",
  "Time": "6:00 PM",
  "State": "Kerala",
  "ConfirmedIndianNational": "3",
  "ConfirmedForeignNational": "0",
  "Cured": "0",
  "Deaths": "0",
  "Confirmed": "3"
},
{
  "_id": ObjectId("625d9d97d68eb6637b7ca02f"),
  "Sno": "5",
  "Date": "03-02-2020",
  "Time": "6:00 PM",
  "State": "Kerala",
  "ConfirmedIndianNational": "3",
  "ConfirmedForeignNational": "0",
  "Cured": "0"
}

```

```
21. db.covid.aggregate( [  
    {  
        $set: {  
            tConfirmedForeignNational: { $sum: "$ConfirmedForeignNational" },  
            tConfirmedIndianNational: { $sum: "$ConfirmedIndianNational" } } },  
        {  
            $set: {  
                total: { $add: [ "$tConfirmedForeignNational ", "$tConfirmedIndianNational ", "$State" ] }  
            }  
        }]  
);
```