**MONGO-DB PROJECT**

**test> show dbs**

**admin 40.00 KiB**

**ball 72.00 KiB**

**config 108.00 KiB**

**cricket 172.00 KiB**

**ecommerce 72.00 KiB**

**education 72.00 KiB**

**local 72.00 KiB**

**testingdb 72.00 KiB**

**Create database**

**test> use college**

**switched to db college**

**college> show collections**

**Create collection**

**college> db.createCollection("student")**

**{ ok: 1 }**

**Show documents**

**college> db.student.find()**

**college> db.student.insertMany([{"college name":"RMS college of engineering","college id":"RMS001","student name":"Ambuja","student id":"me01","birth of year":1998,"phone number":[9535427570,9535427571],"address":{"city":"Halagur","sub district":"Malavalli","pin code":571421,"district":"Mandya"},"total marks":450}])**

**{**

**acknowledged: true,**

**insertedIds: { '0': ObjectId("645a5291d8e5f39d26389aa5") }**

**}**

**college> db.student.insertMany([{"college name":"RMS college of engineering","college id":"RMS001","student name":"Girish","student id":"me01","birth of year":1995,"phone number":[9535427572,9535427573],"address":{"city":"Halagur","sub district":"Malavalli","pin code":571421,"district":"Mandya"},"total marks":460}])**

**{**

**acknowledged: true,**

**insertedIds: { '0': ObjectId("645a52d5d8e5f39d26389aa6") }**

**}**

**college> db.student.insertMany([{"college name":"RMS college of engineering","college id":"RMS001","student name":"Sagar","student id":"me02","birth of year":1994,"phone number":[9535427574,9535427575],"address":{"city":"CK Nagar","sub district":"chennapatna","pin code":571422,"district":"Ramnagar"},"total marks":470}])**

**{**

**acknowledged: true,**

**insertedIds: { '0': ObjectId("645a5372d8e5f39d26389aa7") }**

**}**

**college> db.student.insertMany([{"college name":"RMS college of engineering","college id":"RMS001","student name":"Vikas","student id":"me02","birth of year":1996,"phone number":[9535427576,9535427577],"address":{"city":"Dudda","sub district":"KR Pete","pin code":571423,"district":"Hassan"},"total marks":480}])**

**{**

**acknowledged: true,**

**insertedIds: { '0': ObjectId("645a53f1d8e5f39d26389aa8") }**

**}**

**college> db.student.insertMany([{"college name":"RMS college of engineering","college id":"RMS001","student name":"Laxmi","student id":"me03","birth of year":1997,"phone number":[9535427578,9535427579],"address":{"city":"Nagara","sub district":"Kanakapura","pin code":571424,"district":"Ramnagar"},"total marks":490}])**

**{**

**acknowledged: true,**

**insertedIds: { '0': ObjectId("645a544fd8e5f39d26389aa9") }**

**}**

**college> db.student.find()**

**[**

**{**

**\_id: ObjectId("645a5291d8e5f39d26389aa5"),**

**'college name': 'RMS college of engineering',**

**'college id': 'RMS001',**

**'student name': 'Ambuja',**

**'student id': 'me01',**

**'birth of year': 1998,**

**'phone number': [ 9535427570, 9535427571 ],**

**address: {**

**city: 'Halagur',**

**'sub district': 'Malavalli',**

**'pin code': 571421,**

**district: 'Mandya'**

**},**

**'total marks': 450**

**},**

**{**

**\_id: ObjectId("645a52d5d8e5f39d26389aa6"),**

**'college name': 'RMS college of engineering',**

**'college id': 'RMS001',**

**'student name': 'Girish',**

**'student id': 'me01',**

**'birth of year': 1995,**

**'phone number': [ 9535427572, 9535427573 ],**

**address: {**

**city: 'Halagur',**

**'sub district': 'Malavalli',**

**'pin code': 571421,**

**district: 'Mandya'**

**},**

**'total marks': 460**

**},**

**{**

**\_id: ObjectId("645a5372d8e5f39d26389aa7"),**

**'college name': 'RMS college of engineering',**

**'college id': 'RMS001',**

**'student name': 'Sagar',**

**'student id': 'me02',**

**'birth of year': 1994,**

**'phone number': [ 9535427574, 9535427575 ],**

**address: {**

**city: 'CK Nagar',**

**'sub district': 'chennapatna',**

**'pin code': 571422,**

**district: 'Ramnagar'**

**},**

**'total marks': 470**

**},**

**{**

**\_id: ObjectId("645a53f1d8e5f39d26389aa8"),**

**'college name': 'RMS college of engineering',**

**'college id': 'RMS001',**

**'student name': 'Vikas',**

**'student id': 'me02',**

**'birth of year': 1996,**

**'phone number': [ 9535427576, 9535427577 ],**

**address: {**

**city: 'Dudda',**

**'sub district': 'KR Pete',**

**'pin code': 571423,**

**district: 'Hassan'**

**},**

**'total marks': 480**

**},**

**{**

**\_id: ObjectId("645a544fd8e5f39d26389aa9"),**

**'college name': 'RMS college of engineering',**

**'college id': 'RMS001',**

**'student name': 'Laxmi',**

**'student id': 'me03',**

**'birth of year': 1997,**

**'phone number': [ 9535427578, 9535427579 ],**

**address: {**

**city: 'Nagara',**

**'sub district': 'Kanakapura',**

**'pin code': 571424,**

**district: 'Ramnagar'**

**},**

**'total marks': 490**

**}**

**]**

**updateOne**

**college> db.student.updateOne({"student name":"Ambuja"},{$set:{"student name":"Amrutha"}})**

**{**

**acknowledged: true,**

**insertedId: null**

**matchedCount: 0,**

**modifiedCount: 0,**

**upsertedCount: 0**

**}**

**projection**

**college> db.student.find({"total marks":{$gt:400}},{"student name":1,"\_id":0})**

**[**

**{ 'student name': 'Amrutha' },**

**{ 'student name': 'Girish' },**

**{ 'student name': 'Sagar' },**

**{ 'student name': 'Vikas' },**

**{ 'student name': 'Laxmi' }**

**]**

**AND Condition**

**college> db.student.find({$and:[{"total marks":{$gt:460}},{"total marks":{$lt:500}}]})**

**[**

**{**

**\_id: ObjectId("645a5372d8e5f39d26389aa7"),**

**'college name': 'RMS college of engineering',**

**'college id': 'RMS001',**

**'student name': 'Sagar',**

**'student id': 'me02',**

**'birth of year': 1994,**

**'phone number': [ 9535427574, 9535427575 ],**

**address: {**

**city: 'CK Nagar',**

**'sub district': 'chennapatna',**

**'pin code': 571422,**

**district: 'Ramnagar'**

**},**

**'total marks': 470**

**},**

**{**

**\_id: ObjectId("645a53f1d8e5f39d26389aa8"),**

**'college name': 'RMS college of engineering',**

**'college id': 'RMS001',**

**'student name': 'Vikas',**

**'student id': 'me02',**

**'birth of year': 1996,**

**'phone number': [ 9535427576, 9535427577 ],**

**address: {**

**city: 'Dudda',**

**'sub district': 'KR Pete',**

**'pin code': 571423,**

**district: 'Hassan'**

**},**

**'total marks': 480**

**},**

**{**

**\_id: ObjectId("645a544fd8e5f39d26389aa9"),**

**'college name': 'RMS college of engineering',**

**'college id': 'RMS001',**

**'student name': 'Laxmi',**

**'student id': 'me03',**

**'birth of year': 1997,**

**'phone number': [ 9535427578, 9535427579 ],**

**address: {**

**city: 'Nagara',**

**'sub district': 'Kanakapura',**

**'pin code': 571424,**

**district: 'Ramnagar'**

**},**

**'total marks': 490**

**}**

**]**

**OR Condition**

**college> db.student.find({$or:[{"total marks":{$gt:400}},{"total marks":{$lt:500}}]})**

**[**

**{**

**\_id: ObjectId("645a5291d8e5f39d26389aa5"),**

**'college name': 'RMS college of engineering',**

**'college id': 'RMS001',**

**'student name': 'Amrutha',**

**'student id': 'me01',**

**'birth of year': 1998,**

**'phone number': [ 9535427570, 9535427571 ],**

**address: {**

**city: 'Halagur',**

**'sub district': 'Malavalli',**

**'pin code': 571421,**

**district: 'Mandya'**

**},**

**'total marks': 450**

**},**

**{**

**\_id: ObjectId("645a52d5d8e5f39d26389aa6"),**

**'college name': 'RMS college of engineering',**

**'college id': 'RMS001',**

**'student name': 'Girish',**

**'student id': 'me01',**

**'birth of year': 1995,**

**'phone number': [ 9535427572, 9535427573 ],**

**address: {**

**city: 'Halagur',**

**'sub district': 'Malavalli',**

**'pin code': 571421,**

**district: 'Mandya'**

**},**

**'total marks': 460**

**},**

**{**

**\_id: ObjectId("645a5372d8e5f39d26389aa7"),**

**'college name': 'RMS college of engineering',**

**'college id': 'RMS001',**

**'student name': 'Sagar',**

**'student id': 'me02',**

**'birth of year': 1994,**

**'phone number': [ 9535427574, 9535427575 ],**

**address: {**

**city: 'CK Nagar',**

**'sub district': 'chennapatna',**

**'pin code': 571422,**

**district: 'Ramnagar'**

**},**

**'total marks': 470**

**},**

**{**

**\_id: ObjectId("645a53f1d8e5f39d26389aa8"),**

**'college name': 'RMS college of engineering',**

**'college id': 'RMS001',**

**'student name': 'Vikas',**

**'student id': 'me02',**

**'birth of year': 1996,**

**'phone number': [ 9535427576, 9535427577 ],**

**address: {**

**city: 'Dudda',**

**'sub district': 'KR Pete',**

**'pin code': 571423,**

**district: 'Hassan'**

**},**

**'total marks': 480**

**},**

**{**

**\_id: ObjectId("645a544fd8e5f39d26389aa9"),**

**'college name': 'RMS college of engineering',**

**'college id': 'RMS001',**

**'student name': 'Laxmi',**

**'student id': 'me03',**

**'birth of year': 1997,**

**'phone number': [ 9535427578, 9535427579 ],**

**address: {**

**city: 'Nagara',**

**'sub district': 'Kanakapura',**

**'pin code': 571424,**

**district: 'Ramnagar'**

**},**

**'total marks': 490**

**}**

**]**

**Aggregation(sum)**

**college> db.student.aggregate([{$group: {\_id:"$student id","grand total":{$sum:"$total marks"}}}])**

**[**

**{ \_id: 'me01', 'grand total': 910 },**

**{ \_id: 'me03', 'grand total': 490 },**

**{ \_id: 'me02', 'grand total': 950 }**

**]**

**Aggregation(min)**

**college> db.student.aggregate([{$group:{\_id:"$student id","grand total":{$min:"$total marks"}}}])**

**[**

**{ \_id: 'me02', 'grand total': 470 },**

**{ \_id: 'me01', 'grand total': 450 },**

**{ \_id: 'me03', 'grand total': 490 }**

**]**

**Aggregation(max)**

**college> db.student.aggregate([{$group:{\_id:"$student id","grand total":{$max:"$total marks"}}}])**

**[**

**{ \_id: 'me01', 'grand total': 460 },**

**{ \_id: 'me03', 'grand total': 490 },**

**{ \_id: 'me02', 'grand total': 480 }**

**]**

**Sort function**

**college> db.student.find(). sort({"student name":1})**

**[**

**{**

**\_id: ObjectId("645a5291d8e5f39d26389aa5"),**

**'college name': 'RMS college of engineering',**

**'college id': 'RMS001',**

**'student name': 'Amrutha',**

**'student id': 'me01',**

**'birth of year': 1998,**

**'phone number': [ 9535427570, 9535427571 ],**

**address: {**

**city: 'Halagur',**

**'sub district': 'Malavalli',**

**'pin code': 571421,**

**district: 'Mandya'**

**},**

**'total marks': 450**

**},**

**{**

**\_id: ObjectId("645a52d5d8e5f39d26389aa6"),**

**'college name': 'RMS college of engineering',**

**'college id': 'RMS001',**

**'student name': 'Girish',**

**'student id': 'me01',**

**'birth of year': 1995,**

**'phone number': [ 9535427572, 9535427573 ],**

**address: {**

**city: 'Halagur',**

**'sub district': 'Malavalli',**

**'pin code': 571421,**

**district: 'Mandya'**

**},**

**'total marks': 460**

**},**

**{**

**\_id: ObjectId("645a544fd8e5f39d26389aa9"),**

**'college name': 'RMS college of engineering',**

**'college id': 'RMS001',**

**'student name': 'Laxmi',**

**'student id': 'me03',**

**'birth of year': 1997,**

**'phone number': [ 9535427578, 9535427579 ],**

**address: {**

**city: 'Nagara',**

**'sub district': 'Kanakapura',**

**'pin code': 571424,**

**district: 'Ramnagar'**

**},**

**'total marks': 490**

**},**

**{**

**\_id: ObjectId("645a5372d8e5f39d26389aa7"),**

**'college name': 'RMS college of engineering',**

**'college id': 'RMS001',**

**'student name': 'Sagar',**

**'student id': 'me02',**

**'birth of year': 1994,**

**'phone number': [ 9535427574, 9535427575 ],**

**address: {**

**city: 'CK Nagar',**

**'sub district': 'chennapatna',**

**'pin code': 571422,**

**district: 'Ramnagar'**

**},**

**'total marks': 470**

**},**

**{**

**\_id: ObjectId("645a53f1d8e5f39d26389aa8"),**

**'college name': 'RMS college of engineering',**

**'college id': 'RMS001',**

**'student name': 'Vikas',**

**'student id': 'me02',**

**'birth of year': 1996,**

**'phone number': [ 9535427576, 9535427577 ],**

**address: {**

**city: 'Dudda',**

**'sub district': 'KR Pete',**

**'pin code': 571423,**

**district: 'Hassan'**

**},**

**'total marks': 480**

**}**

**]**

**Sort function (descending)**

**college> db.student.find().sort({"total marks":-1})**

**[**

**{**

**\_id: ObjectId("645a544fd8e5f39d26389aa9"),**

**'college name': 'RMS college of engineering',**

**'college id': 'RMS001',**

**'student name': 'Laxmi',**

**'student id': 'me03',**

**'birth of year': 1997,**

**'phone number': [ 9535427578, 9535427579 ],**

**address: {**

**city: 'Nagara',**

**'sub district': 'Kanakapura',**

**'pin code': 571424,**

**district: 'Ramnagar'**

**},**

**'total marks': 490**

**},**

**{**

**\_id: ObjectId("645a53f1d8e5f39d26389aa8"),**

**'college name': 'RMS college of engineering',**

**'college id': 'RMS001',**

**'student name': 'Vikas',**

**'student id': 'me02',**

**'birth of year': 1996,**

**'phone number': [ 9535427576, 9535427577 ],**

**address: {**

**city: 'Dudda',**

**'sub district': 'KR Pete',**

**'pin code': 571423,**

**district: 'Hassan'**

**},**

**'total marks': 480**

**},**

**{**

**\_id: ObjectId("645a5372d8e5f39d26389aa7"),**

**'college name': 'RMS college of engineering',**

**'college id': 'RMS001',**

**'student name': 'Sagar',**

**'student id': 'me02',**

**'birth of year': 1994,**

**'phone number': [ 9535427574, 9535427575 ],**

**address: {**

**city: 'CK Nagar',**

**'sub district': 'chennapatna',**

**'pin code': 571422,**

**district: 'Ramnagar'**

**},**

**'total marks': 470**

**},**

**{**

**\_id: ObjectId("645a52d5d8e5f39d26389aa6"),**

**'college name': 'RMS college of engineering',**

**'college id': 'RMS001',**

**'student name': 'Girish',**

**'student id': 'me01',**

**'birth of year': 1995,**

**'phone number': [ 9535427572, 9535427573 ],**

**address: {**

**city: 'Halagur',**

**'sub district': 'Malavalli',**

**'pin code': 571421,**

**district: 'Mandya'**

**},**

**'total marks': 460**

**},**

**{**

**\_id: ObjectId("645a5291d8e5f39d26389aa5"),**

**'college name': 'RMS college of engineering',**

**'college id': 'RMS001',**

**'student name': 'Amrutha',**

**'student id': 'me01',**

**'birth of year': 1998,**

**'phone number': [ 9535427570, 9535427571 ],**

**address: {**

**city: 'Halagur',**

**'sub district': 'Malavalli',**

**'pin code': 571421,**

**district: 'Mandya'**

**},**

**'total marks': 450**

**}**

**]**

**Limit function**

**college> db.student.find().limit(2)**

**[**

**{**

**\_id: ObjectId("645a5291d8e5f39d26389aa5"),**

**'college name': 'RMS college of engineering',**

**'college id': 'RMS001',**

**'student name': 'Amrutha',**

**'student id': 'me01',**

**'birth of year': 1998,**

**'phone number': [ 9535427570, 9535427571 ],**

**address: {**

**city: 'Halagur',**

**'sub district': 'Malavalli',**

**'pin code': 571421,**

**district: 'Mandya'**

**},**

**'total marks': 450},**

**{**

**\_id: ObjectId("645a52d5d8e5f39d26389aa6"),**

**'college name': 'RMS college of engineering',**

**'college id': 'RMS001',**

**'student name': 'Girish',**

**'student id': 'me01',**

**'birth of year': 1995,**

**'phone number': [ 9535427572, 9535427573 ],**

**address: {**

**city: 'Halagur',**

**'sub district': 'Malavalli',**

**'pin code': 571421,**

**district: 'Mandya'**

**},**

**'total marks': 460**

**}**

**]**

**Delete One**

**college> db.student.deleteOne({"student name":"Sagar"})**

**{ acknowledged: true, deletedCount: 1 }**

**After deleting One document output is**

**'sub district': 'Kanakapura',**

**'pin code': 571424,**

**district: 'Ramnagar'**

**},college> db.student.find()**

**[**

**{**

**\_id: ObjectId("645a5291d8e5f39d26389aa5"),**

**'college name': 'RMS college of engineering',**

**'college id': 'RMS001',**

**'student name': 'Amrutha',**

**'student id': 'me01',**

**'birth of year': 1998,**

**'phone number': [ 9535427570, 9535427571 ],**

**address: {**

**city: 'Halagur',**

**'sub district': 'Malavalli',**

**'pin code': 571421,**

**district: 'Mandya'**

**},**

**'total marks': 450**

**},**

**{**

**\_id: ObjectId("645a52d5d8e5f39d26389aa6"),**

**'college name': 'RMS college of engineering',**

**'college id': 'RMS001',**

**'student name': 'Girish',**

**'student id': 'me01',**

**'birth of year': 1995,**

**'phone number': [ 9535427572, 9535427573 ],**

**address: {**

**city: 'Halagur',**

**'sub district': 'Malavalli',**

**'pin code': 571421,**

**district: 'Mandya'**

**},**

**'total marks': 460**

**},**

**{**

**\_id: ObjectId("645a53f1d8e5f39d26389aa8"),**

**'college name': 'RMS college of engineering',**

**'college id': 'RMS001',**

**'student name': 'Vikas',**

**'student id': 'me02',**

**'birth of year': 1996,**

**'phone number': [ 9535427576, 9535427577 ],**

**address: {**

**city: 'Dudda',**

**'sub district': 'KR Pete',**

**'pin code': 571423,**

**district: 'Hassan'**

**},**

**'total marks': 480**

**},**

**{**

**\_id: ObjectId("645a544fd8e5f39d26389aa9"),**

**'college name': 'RMS college of engineering',**

**'college id': 'RMS001',**

**'student name': 'Laxmi',**

**'student id': 'me03',**

**'birth of year': 1997,**

**'phone number': [ 9535427578, 9535427579 ],**

**address: {**

**city: 'Nagara',**

**'total marks': 490**

**}**

**]**