Chit 20 –

use my\_db

• Create Collection

db.createCollection("students")

• Insert some documents

db.students.insert([

... {

... "rollno": 1,

... "name": "Navin",

... "subject": "DMSA",

... "marks": 78

... },

... {

... "rollno": 2,

... "name": "Anusha",

... "subject": "OSD",

... "marks": 75

... },

... {

... "rollno": 3,

... "name": "Ravi",

... "subject": "TOC",

... "marks": 69

... },

... {

... "rollno": 4,

... "name": "Veena",

... "subject": "TOC",

... "marks": 70

... },

... {

... "rollno": 5,

... "name": "Pravini",

... "subject": "OSD",

... "marks": 80

... },

... {

... "rollno": 6,

... "name": "Reena",

... "subject": "DMSA",

... "marks": 50

... },

... {

... "rollno": 7,

... "name": "Geeta",

... "subject": "CN",

... "marks": 90

... },

... {

... "rollno": 8,

... "name": "Akash",

... "subject": "CN",

... "marks": 85

... }

... ])

• Create Single Index.

db.students.createIndex({rollno: 1})

• Create Compound Index.

db.students.createIndex({subject: 1, name: 1})

• Create Unique on Collection

db.students.createIndex({name: 1}, {unique: true})

• Show Index Information

db.students.getIndexes()

• Remove Index

db.students.dropIndex({rollno: 1})

• Write aggregate function to find Max marks of Each Subject.

db.students.aggregate(

... [

... {

... $group: {

... \_id: "$subject",

... max\_marks: {$max: "$marks"}

... }

... }

... ]).pretty()

• Write aggregate function to find Min marks of Each Subject.

db.students.aggregate(

... [

... {

... $group: {

... \_id: "$subject",

... min\_marks: {$min: "$marks"}

... }

... }

... ]).pretty()

• Write aggregate function to find Sum of marks of Each Subject.

db.students.aggregate(

... [

... {

... $group: {

... \_id: "$subject",

... sum\_marks: {$sum: "$marks"}

... }

... }

... ]).pretty()

• Write aggregate function to find Avg of marks of Each Subject.

db.students.aggregate(

... [

... {

... $group: {

... \_id: "$subject",

... avg\_marks: {$avg: "$marks"}

... }

... }

... ]).pretty()

• Write aggregate function to find first record of Each Subject.

db.students.aggregate(

... [

... {

... $group: {

... \_id: "$subject",

... first\_record: {$first: "$subject"}

... }

... }

... ]).pretty()

• Write aggregate function to find last record of Each Subject.

db.students.aggregate(

... [

... {

... $group: {

... \_id: "$subject",

... last\_record: {$last: "$subject"}

... }

... }

... ]).pretty()

• Write aggregate function to find count number of records of each subject

db.students.aggregate(

... [

... {

... $group: {

... \_id: "$subject",

... no\_of\_subjects: {$sum: 1}

... }

... }

... ]).pretty()