

Assignment 5

- ① Get the details of all the faculty
→ db.faculty.find().pretty()
- ② Get the count of all faculty members
→ db.faculty.find().count()
- ③ Get all the faculty members whose qualification is "Ph.D".
→ db.faculty.find({qualification: 'Ph.D'}).pretty()
- ④ Get all the faculty members whose experience is between 8 to 12 years.
→ db.faculty.find({\$and: [{exp: {\$gt: 8, \$lt: 12}}]}).pretty()
- ⑤ Get all the faculty member who teach "MATHS" or "NETWORKING".
→ db.faculty.find({subject: {\$in: ["MATHS", "NETWORKING"]}}).pretty()
- ⑥ Get all the faculty members who teach "MATHS" & whose age is more than 30 years & qualification must be "Ph.D".
→ db.faculty.find({\$and: [{subject: 'MATHS'}, {age: {\$gt: 30}}, {qualification: 'Ph.D'}]}).pretty()

- ⑦ Get all the faculty members who are working part-time or who teach "JAVA"
→ db.faculty.find({\$or: [{type: "Part Time"}, {Subjects: "JAVA"}]}, pretty())

- ⑧ Add the following new faculty members:
→ db.faculty.insert({name: "Swresh Babu", age: 55, gender: "M", exp: 25, Subjects: ["MATHS", "DE"], type: "full time", qualification: "Ph.D"})

- a) update the data of all faculty members by incrementing their age and exp by one year.
→ db.faculty.updateMany({\$inc: {age: 1, exp: 1}})

- ⑩ update the faculty "sivani" with the following data: update qualification to "Ph.D" & type to "full time".
→ db.faculty.updateMany({name: "Sivani"}, {\$set: {qualification: "Ph.D", type: "full time"}})

- (1) update all faculty members who are teaching "MATHS" such that they should now also teach "PSK".
→ db.Faculty.updateMany({\$subjects: "MATHS"}, {\$push: {\$subjects: "PSK"}})
- (2) Delete all faculty member whose age is more than 55 years.
→ db.Faculty.DeleteMany({\$age: {\$gt: 55}})
- (3) Get only the name & qualification of all faculty members.
→ db.Faculty.find({\$name: 1, -\$id: 1, \$qualification: 1}); pretty()
- (4) Get the name, qualification & exp of all faculty members and display the same in ascending order of exp.
→ db.Faculty.find({\$name: 1, -\$id: 1, \$qualification: 1, \$exp: 1}).sort({\$exp: -1}).pretty()
- (5) Sort the faculty details by their age (desc order) & get the details of the first five faculty members only.
→ db.Faculty.find({\$}).sort({\$age: -1}).limit(5).pretty()

(16) find total no. of faculty having qualification
is "Ph.D".
→ db. faculty . find ({"qualification": "Ph.D"}).
Count()

(17) find total no. of Male families.
→ db. faculty . find ({"gender": "M"}). Count()

(18) find avg exp of Male & Female faculty
db. faculty . aggregate ({
\$group: {
- id: "\$gender"
averageExp: {\$avg: "\$exp"}
}})

(19) find total no. of male "full time" faculty
db. faculty . find ({"gender": "M",
"type": "full time"}). Count()

(20) find total no. of faculty , average exp
for all male & female faculties
db. faculty . aggregate ({
\$group: {
- id: "\$gender"
totalFaculty: {\$sum: 1}
avgMaleExp: {\$avg: "\$age"}
avgFemaleExp: {\$avg: "\$age"}
}})

21) find total no. of male faculty having more than 8 year of experience

→ db.Faculty.find({\$and:[{\$gender:'M'}, {\$exp >= 8}]})