**NoSQL Database ASSIGNMENT - 1**

**Name**: Aditya Narain Jha

**Roll No**: 21CSU129

**Class**: FS-V-FA

**Sem**: 5th

**DATA INSERTION CODE:**

use your\_database\_name (nosql in my case)

db.employees.insertMany([

{

emono: 111,

ename: "Milit Chawla",

sal: 40000.00,

dept: { deptno: 12, dname: "Hr", dloc: "Mumbai" },

Desg: "Analyst",

Bonus: 7000.00,

mgr: { name: "Satish", num: 111 },

project: [

{ name: "Project-1", Hrs: 4 },

{ name: "Project-2", Hrs: 4 }

]

},

{

emono: 112,

ename: "Aditya Jha",

sal: 104000.00,

dept: { deptno: 13, dname: "CS", dloc: "Mumbai" },

Desg: "Coder",

Bonus: 8000.00,

mgr: { name: "Rohan", num: 112 },

project: [

{ name: "Project-1", Hrs: 4 },

{ name: "Project-2", Hrs: 4 }

]

},

{

emono: 113,

ename: "Shivam",

sal: 44000.00,

Bonus: 7000.00,

dept: { deptno: 13, dname: "Hr", dloc: "Mumbai" },

Desg: " Analyst ",

mgr: { name: " Satish", num: 111 },

project: [

{ name: "Project-1", Hrs: 4 },

{ name: "Project-2", Hrs: 4 }

]

},

{

emono: 114,

ename: "Arjun",

sal: 74000.00,

Bonus: 8000.00,

dept: { deptno: 13, dname: "CS", dloc: "Mumbai" },

Desg: "Coder",

mgr: { name: " Rohan", num: 111 },

project: [

{ name: "Project-1", Hrs: 4 },

{ name: "Project-2", Hrs: 4 }

]

},

{

emono: 113,

ename: "Sanidhya",

sal: 94000.00,

Bonus: 8000.00,

dept: { deptno: 13, dname: "Hr", dloc: "Mumbai" },

Desg: " Analyst ",

mgr: { name: " Satish", num: 111 },

project: [

{ name: "Project-1", Hrs: 4 },

{ name: "Project-2", Hrs: 4 }

]

},

])

**ANSWERS:**

1. db.Employee.updateMany(

{ "Desg": "CLERK" },

{ $set: { "Desg": "AO" } }

);

1. db.Employee.updateMany(

{ "Desg": "Analyst", "project.name": "Project-1" },

{ $set: { "project.$.Hrs": 5 } }

);

1. db.Employee.updateMany(

{ "ename": /^Deep/ }, // Find employees whose names start with "Deep"

{

$push: {

"project": { $each: [{ "name": "project-3", "Hrs": 2 }, { "name": "project-4", "Hrs": 2 }] }

}

}

);

1. db.Employee.updateMany(

{ "sal": { $gt: 50000 } },

{ $inc: { "bonus": 2000 } }

);

db.Employee.updateMany(

{ "sal": { $lt: 50000, $gt: 30000 } },

{ $inc: { "bonus": 1500 } }

);

db.Employee.updateMany(

{ "sal": { $lte: 30000 } },

{ $inc: { "bonus": 1000 } }

);

1. db.Employee.updateMany(

{ "mgr.name": "Satish" },

{

$set: {

"mgr.name": "Tushar",

"mgr.num": 3333

}

}

);

1. db.Employee.updateMany(

{ "dept.dname": "purchase department" },

{ $inc: { "sal": 15000 } }

);

1. db.Employee.updateMany(

{ "project.name": "project-2" },

{ $inc: { "project.$.Hrs": -2 } }

);

1. db.Employee.updateMany(

{ "project.name": "project-2", "project.Hrs": 4 },

{ $pull: { "project": { "name": "project-2" } } }

);

1. db.Employee.updateMany(

{ "sal": { $lt: 10000 } },

{ $set: { "sal": 10000 } }

);

1. db.Employee.updateMany(

{

$or: [

{ "bonus": { $lt: 2000 } },

{ "sal": { $lt: 20000 } },

{ "dept.dname": "sales department" }

]

},

{ $inc: { "bonus": 500 } }

);

1. db.Employee.updateMany(

{

$or: [

{ "Desg": "Analyst" },

{ "sal": { $in: [30000, 33000, 35000] } }

]

},

{

$push: {

"project": {

$each: [

{ "name": "New Project 1", "Hrs": 0 },

{ "name": "New Project 2", "Hrs": 0 }

],

$position: 2

}

}

}

);

1. db.Employee.updateMany(

{

"dept.dname": "HR",

"dept.dloc": "Mumbai"

},

{ $pop: { "project": 1 } }

);

1. db.Employee.updateMany(

{ "project.name": "Project-1", "project.Hrs": 4 },

{ $set: { "Desg": "senior programmer" } }

);

1. db.Employee.updateMany(

{ "mgr.name": { $in: ["Rajan", "Revati"] } },

{ $set: { "hobbies": ["Hobby1", "Hobby2"] } }

);

1. db.Employee.updateMany(

{

$or: [

{ "project.name": "project-4", "project.Hrs": 3 },

{ "project.name": "project-3", "project.Hrs": 4 }

]

},

{ $set: { "skillset": ["Skill1", "Skill2"] } }

);

1. db.Employee.updateMany(

{

"ename": { $regex: "^[Rp].\*[js]$" }

},

{ $push: { "hobbies": { $each: ["blogging"], $position: 2 } } }

);

1. db.Employee.updateMany(

{ "project.name": { $in: ["project-1", "project-2", "project-3"] } },

{ $inc: { "sal": 10000 } }

);

db.Employee.updateMany(

{ "dept.dloc": "Mumbai" },

{ $inc: { "bonus": -1000, "sal": 1000 } }

);

1. db.Employee.updateMany(

{ "project.name": "project-1" },

{ $pull: { "project": { "name": "project-1" } } }

);

1. db.Employee.replaceOne(

{ "ename": "Deepak" },

{

"emono": 123,

"ename": "New Employee",

"sal": 50000,

"dept": {

"deptno": 10,

"dname": "IT",

"dloc": "Bangalore"

},

"Desg": "Developer",

"mgr": {

"name": "Rajan",

"num": 456

},

"project": [

{

"name": "Project-5",

"Hrs": 6

}

]

}

);

1. db.Employee.updateMany(

{ "skillset": "python" },

{ $set: { "skillset.$": "python 3.8" } }

);

1. db.Employee.updateMany(

{ "dept.dloc": "Pune" },

{ $push: { "skillset": { $each: ["MongoDB", "Perl"] } } }

);

1. db.Employee.updateMany(

{ "project.name": { $in: ["project-1", "project-2"] } },

{ $pop: { "hobbies": -1 } }

);

1. db.Employee.updateMany(

{ "project.1.Hrs": 4 },

{ $pop: { "hobbies": 1 } }

);

1. db.Employee.updateMany(

{ "skillset": { $in: ["Perl", "python"] } },

{

$push: {

"project": { $each: [{ "name": "New Project 1", "Hrs": 0 }, { "name": "New Project 2", "Hrs": 0 }] }

}

}

);

1. db.Employee.updateMany(

{ "project.name": "project-1", "project.Hrs": { $lt: 6 } },

{ $set: { "project.$.Hrs": 6 } }

);