

# NSBD Assignment

## Yash Sharma 21CSU269

### FS-V-FS-A

Collection:-

```
}
assignment1> db.employee.find();
[
  {
    _id: ObjectId("64e9f715a4671ba8b36ae3ee"),
    emono: 111,
    ename: 'Deepali Vaidya',
    sal: 40000,
    dept: { deptno: 12, dname: 'Hr', dloc: 'Mumbai' },
    Desg: 'Analyst',
    Bonus: 7000,
    mgr: { name: 'Satish', num: 111 },
    project: [ { name: 'Project-1', Hrs: 4 }, { name: 'project2', Hrs: 4 } ]
  },
  {
    _id: ObjectId("64e9f969a4671ba8b36ae3ef"),
    emono: 112,
    ename: 'Ravi kumar',
    sal: 50000,
    dept: { deptno: 13, dname: 'Hr', dloc: 'Mumbai' },
    Desg: 'Enginner',
    Bonus: 7000,
    mgr: { name: 'Satish', num: 111 },
    project: [ { name: 'Project-1', Hrs: 4 }, { name: 'project2', Hrs: 4 } ]
  },
  {
    _id: ObjectId("64e9f989a4671ba8b36ae3f0"),
    emono: 113,
    ename: 'Lokesh Sharma',
    sal: 60000,
    dept: { deptno: 14, dname: 'Hr', dloc: 'Delhi' },
    Desg: 'Analyst',
    Bonus: 7000,
    mgr: { name: 'Satish', num: 111 },
    project: [ { name: 'Project-3', Hrs: 4 }, { name: 'project4', Hrs: 5 } ]
  },
  {
    _id: ObjectId("64e9f99ea4671ba8b36ae3f1"),
    emono: 114,
    ename: 'Ram Kumar',
    sal: 70000,
    dept: { deptno: 12, dname: 'CS', dloc: 'Mumbai' },
    Desg: 'SDE',
    Bonus: 7000,
    mgr: { name: 'Tushar', num: 111 },
    project: [ { name: 'Project-5', Hrs: 6 }, { name: 'project6', Hrs: 4 } ]
  },
  {
    _id: ObjectId("64e9f9b2a4671ba8b36ae3f2"),
    emono: 115,
    ename: 'Deepak Kalal',
    sal: 80000,
    dept: { deptno: 12, dname: 'Finance', dloc: 'Mumbai' },
    Desg: 'Analyst',
    Bonus: 7000,
    mgr: { name: 'Kabir', num: 111 },
    project: [ { name: 'Project-7', Hrs: 2 }, { name: 'project8', Hrs: 9 } ]
  }
]
assignment1> |
```

1. db.employee.updateMany({desg:"Clerk"},{\$set:{desg:"Administrative officer"}})

```
assignment1> db.employee.updateMany({desg:"Clerk"},{$set:{desg:"Administrative officer"}})
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
```

2. db.employee.updateMany({\$and:[{desg:"Analyst" },{project:{name:"Project-1"}}]},{\$set:{Project:{name:"Project-5"}}})

```
assignment1> db.employee.updateMany({$and:[{desg:"Analyst"},{project:{name:"Project-1"}}]},{$set:{Project:{name:"Project-5"}}})
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
```

3. db.employee.updateMany({ename:"Deepali Vaidya"},{\$set:{project:[{name:"project-3",Hrs:2},{name:"project-4",Hrs:2}]}})

```
assignment1> db.employee.updateMany({ename:"Deepali Vaidya"},{$set:{project:[{name:"project-3",Hrs:2},{name:"project-4",Hrs:2}]}})
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 1,
  upsertedCount: 0
}
```

4. db.employee.updateMany( { "sal": { \$gt: 50000 } }, { \$inc: { "bonus": 2000 } } );

```
assignment1> db.employee.updateMany( { "sal": { $gt: 50000 } }, { $inc: { "bonus": 2000 } } );
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 3,
  modifiedCount: 3,
  upsertedCount: 0
}
```

db.employee.updateMany( { "sal": { \$lt: 50000, \$gt: 30000 } }, { \$inc: { "bonus": 1500 } } );

```
assignment1> db.employee.updateMany( { "sal": { $lt: 50000, $gt: 30000 } }, { $inc: { "bonus": 1500 } } );
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 1,
  upsertedCount: 0
}
```

db.employee.updateMany( { "sal": { \$lte: 30000 } }, { \$inc: { "bonus": 1000 } } );

```
assignment1> db.employee.updateMany( { "sal": { $lte: 30000 } }, { $inc: { "bonus": 1000 } } );
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
```

5. db.employee.updateMany({"mgr.name":"Satish"},{\$set:{"mgr.name":"Tushar"}})

```
assignment1> db.employee.updateMany({"mgr.name":"Satish"},{$set:{"mgr.name":"Tushar"}})
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 3,
  modifiedCount: 3,
  upsertedCount: 0
}
```

6. db.employee.updateMany({"dep.dname":"Purchase"},{\$inc:{"sal":15000}})

```
assignment1> db.employee.updateMany({"dep.dname":"Purchase"},{$inc:{"sal":15000}})
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
```

7. db.employee.updateMany({"project.name":"Project-2"},{\$inc:{project.\$Hrs:-2}})

```
assignment1> db.employee.updateMany({ 'project.name': 'project-2' }, { $inc: { 'project.$Hrs': -2 } });
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
```

8. db.employee.updateMany({"project.name": "Project-2", "project.Hrs": 4 },{ \$pull: { "project": { "name": "Project-2" } } });

```
assignment1> db.employee.updateMany({ 'project.name': 'project-2', 'project.Hrs': 4 }, { $pull: { project: { name: 'project-2' } } });
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
```

9. db.employee.updateMany({"sal": { \$lt: 10000 } },{\$set: {"sal": 10000 } });

```
assignment1> db.employee.updateMany({ sal: { $lt: 10000 } }, { $set: { sal: 10000 } });
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
```

10. db.employee.updateMany{\$or: [{ "bonus": { \$lt: 2000 } },{ "sal": { \$lt: 20000 } },{ "dept.dname": "sales department" }},{ \$inc: { "bonus": 500 } });

```
assignment1> db.employee.updateMany({ $or: [{ bonus: { $lt: 2000 } }, { sal: { $lt: 20000 } }, { 'dept.dname': 'sales' } ] }, { $inc: { bonus: 500 } });
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
```

11. 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 } } } );

```
assignment1> db.employee.updateMany({ $or: [{ desg: 'Analyst' }, { sal: { $in: [30000, 33000, 35000] } } ] }, { $push: { project: { $each: [{ name: 'New-Proj-1', hrs: 0 }, { name: 'New-Project2', Hrs: 0 } ], $position: 1 } } });
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
```

12. db.employee.updateMany( { "dept.dname": "HR", "dept.dloc": "Mumbai" }, { \$pop: { "project": 1 } } );

```
assignment1> db.employee.updateMany({ 'dept.dname': 'HR', 'dept.dloc': 'Mumbai' }, { $pop: { project: 1 } });
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
```

13. db.employee.updateMany( { "project.name": "Project-1", "project.Hrs": 4 }, { \$set: { "Desg": "senior programmer" } } );

```
assignment1> db.employee.updateMany({ 'project.name': 'Project 1', 'project.hrs': 4 }, { $set: { desg: 'Senior Programmer' } });
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
```

14. db.employee.updateMany( { "mgr.name": { \$in: ["Rajan", "Revati"] } }, { \$set: { "hobbies": ["Hobby1", "Hobby2"] } } );

```
assignment1> db.employee.updateMany({ 'mgr.name': { $in: ['Rajan', 'Revati'] } }, { $set: { hobbies: ['hobby1', 'hobby2'] } });
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
```

15. db.employee.updateMany( { \$or: [ { "project.name": "project-4", "project.Hrs": 3 }, { "project.name": "project-3", "project.Hrs": 4 } ] }, { \$set: { "skillset": ["Skill1", "Skill2"] } } );

```
assignment1> db.employee.updateMany({ $or: [{ 'project.name': 'project-4', 'project.Hrs': 3 }, { 'project.name': 'project-3', 'project.Hrs': 4 } ] }, { $set: { skillset: ['skill1', 'skill2'] } });
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
```

16. db.Employee.updateMany( { "ename": { \$regex: "[Rr].\*[js]\$" } }, { \$push: { "hobbies": { \$each: ["blogging"], \$position: 2 } } } );

```
assignment1> db.employee.updateMany({ $or: [{ ename: { $regex: /^[Rr].*[js]$/ } } ] }, { $push: { hobbies: { $each: [ 'blogging' ], $position: 2 } } });
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
```

17. (i) `db.employee.updateMany({ "project.name": { $in: ["project-1", "project-2", "project-3"] } }, { $inc: { "sal": 10000 } });`  
(ii) `db.employee.updateMany({ "dept.dloc": "Mumbai" }, { $inc: { "bonus": -1000, "sal": 1000 } });`

```
assignment1> db.employee.updateMany({ "project.name": { $in: ["project-1", "project-2", "project-3"] } }, { $inc: { "sal": 10000 } });
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 1,
  upsertedCount: 0
}
assignment1> db.employee.updateMany({ "dept.dloc": "Mumbai" }, { $inc: { "bonus": -1000, "sal": 1000 } });
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 4,
  modifiedCount: 4,
  upsertedCount: 0
}
```

18. `db.employee.updateMany({ 'project.name': 'project-1' }, { $pull: { project: { name: 'project-1' } } });`

```
assignment1> db.employee.updateMany({ 'project.name': 'project-1' }, { $pull: { project: { name: 'project-1' } } });
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
```

19. `db.employee.updateMany( { "skillset": "python" }, { $set: { "skillset.$": "python 3.8" } } );`

```
assignment1> db.employee.updateMany( { "skillset": "python" }, { $set: { "skillset.$": "python 3.8" } });
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
```

20. `db.employee.updateMany( { "dept.dloc": "Pune" }, { $push: { "skillset": { $each: ["MongoDB", "Perl"] } } } );`

```
assignment1> db.employee.updateMany( { "dept.dloc": "Pune" }, { $push: { "skillset": { $each: ["MongoDB", "Perl"] } } } );
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
```

21. `db.Employee.updateMany( { "project.name": { $in: ["project-1", "project-2"] } }, { $pop: { "hobbies": -1 } } );`

```
assignment1> db.Employee.updateMany( { "project.name": { $in: ["project-1", "project-2"] } }, { $pop: { "hobbies": -1 } } );
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
```

22. db.employee.updateMany( { "project.1.Hrs": 4 }, { \$pop: { "hobbies": 1 } } );

```
assignment1> db.employee.updateMany( { "project.1.Hrs": 4 }, { $pop: { "hobbies": 1 } } );
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 2,
  modifiedCount: 0,
  upsertedCount: 0
}
```

23. db.employee.updateMany( { "skillset": { \$in: ["Perl", "python"] } }, { \$push: { "project": { \$each: [{ "name": "New Project 1", "Hrs": 0 }, { "name": "New Project 2", "Hrs": 0 } ] } } } );

```
assignment1> db.employee.updateMany( { "skillset": { $in: ["Perl", "python"] } }, { $push: { "project": { $each: [{ "name": "New Project 1", "Hrs": 0 }, { "name": "New Project 2", "Hrs": 0 } ] } } } );
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
```

24. db.employee.updateMany( { "project.name": "Project-1", "project.Hrs": { \$lt: 6 } }, { \$set: { "project.\$.Hrs": 6 } } );

```
assignment1> db.employee.updateMany( { "project.name": "Project-1", "project.Hrs": { $lt: 6 } }, { $set: { "project.$.Hrs": 6 } } );
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 1,
  upsertedCount: 0
}
```