

# NSDB

## ASSINGMENT - 1

Name: Gaurav Raj  
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Class: FS-V-FA  
Semester: 5<sup>th</sup>

Database Name: employees

```
[
  {
    "emono": 111,
    "ename": "Deepali Vaidya",
    "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": "Prateek Kuhad",
    "sal": 70000.00,
    "dept": { "deptno": 13, "dname": "CS", "dloc": "Mumbai" },
    "Desg": "Scientist",
    "Bonus": 9000.00,
    "mgr": { "name": "Aryan", "num": 112 },
    "project": [
      { "name": "Project-1", "Hrs": 4 },
      { "name": "Project-2", "Hrs": 4 }
    ]
  },
  {
    "emono": 113,
    "ename": "Vivek Kaul",
    "sal": 44000.00,
    "Bonus": 7000.00,
    "dept": { "deptno": 12, "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": "Vaibhav Sharma",
  "sal": 87000.00,
  "Bonus": 9000.00,
  "dept": { "deptno": 13, "dname": "CS", "dloc": "Mumbai" },
  "Desg": "Scientist",
  "mgr": { "name": "Aryan", "num": 112 },
  "project": [
    { "name": "Project-1", "Hrs": 4 },
    { "name": "Project-2", "Hrs": 4 }
  ]
},
{
  "emono": 115,
  "ename": "Prabh Singh",
  "sal": 66000.00,
  "Bonus": 9000.00,
  "dept": { "deptno": 12, "dname": "Hr", "dloc": "Mumbai" },
  "Desg": "Analyst",
  "mgr": { "name": "Satish", "num": 111 },
  "project": [
    { "name": "Project-1", "Hrs": 4 },
    { "name": "Project-2", "Hrs": 4 }
  ]
}
]
```

1.

```
[nsdb> db.employees.updateMany(
[... {'Desg': 'CLERK'},
[... {$set: {'Desg': 'AO'}}
[... ]);
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
```

2.

```
[nsdb> db.employees.updateMany(
[... {'Desg': 'Analyst', 'project.name': 'Project-1'},
[... {$set: {'project.$Hrs': 5}}
[... ]);
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 1,
  upsertedCount: 0
}
```

3.

```
[nsdb> db.employees.updateMany(
[... {'ename': /^Deep/},
[... { $push: {'project': {$each: [
[... {'name': 'Project-3', 'Hrs': 2},
[... {'name': 'Project-4', 'Hrs': 2}
[... ]}}}]);
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 1,
  upsertedCount: 0
}
```

4.

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

```
[nsdb> db.employees.updateMany(
[... {'sal': {'$lt: 50000, $gt: 30000}},
[... {'$inc: {'bonus': 1500}}
[... );
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 2,
  modifiedCount: 2,
  upsertedCount: 0
}
```

```
[nsdb> db.employees.updateMany(
[... {'sal': {'$lte: 30000}},
[... {'$inc: {'bonus': 1000}}
[... );
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
```

5.

```
[nsdb> db.employees.updateMany(
... {'mgr.name': 'Satish'},
... {$set: {'mgr.name': 'Tushar', 'mgr.num': 3333}}
... );
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 1,
  upsertedCount: 0
}
```

6.

```
[nsdb> db.employees.updateMany(
... {'dept.dname': 'purschase department'},
... {$inc: {'sal': 15000}}
... );
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
```

7.

```
[nsdb> db.employees.updateMany(
... {'project.name': 'Project-2'},
... {$inc: {'project.$.Hrs': -2}}
... );
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 5,
  modifiedCount: 5,
  upsertedCount: 0
}
```

8.

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

9.

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

10.

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

11.

```
[nsdb> db.employees.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]}}]);
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 1,
  upsertedCount: 0
}
```

12.

```
[nsdb> db.employees.updateMany(
[... {'dept.dname': 'HR', 'dept.dloc': 'Mumbai'},
[... {'$pop': {'Project': 1}}
[... ]);
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
```

13.

```
[nsdb> db.employees.updateMany(
[... {'project.name': 'Project-1', 'project.Hrs': 4},
[... {'$set': {'Desg': 'senior programmer'}}
[... ]);
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 4,
  modifiedCount: 4,
  upsertedCount: 0
}
```

14.

```
[nsdb> db.employees.updateMany(
... {$or: [{'mgr.name': 'Rajan'}, {'mgr.name': 'Revati'}]},
... {$set: {'hobbies': ['Singing', 'Dancing']}}
... );
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
```

15.

```
[nsdb> db.employees.updateMany(
... {$or: [{'project.name': 'Project-4', 'project.Hrs': 3},
... {'project.name': 'Project-3', 'project.Hrs': 4}]},
... {$set: {'skillset': ['Java', 'Python']}}
... );
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
```

16.

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



17.

```
[nsdb> db.employees.updateMany(
[... {'project.name': {'$in': ['Project-1', 'Project-2', 'Project-3']}},
[... {'$inc': {'sal': 10000}}
[... );
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 5,
  modifiedCount: 5,
  upsertedCount: 0
}
```

```
[nsdb> db.employees.updateMany(
[... {'dept.dloc': 'Mumbai'},
[... {'$inc': {'bonus': -1000, 'sal': 1000}}
[... );
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 5,
  modifiedCount: 5,
  upsertedCount: 0
}
```

18.

```
[nsdb> db.employees.updateMany(
[... {'project.name': 'Project-1'},
[... {'$pull': {'project': {'name': 'Project-1'}}}
[... );
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 5,
  modifiedCount: 5,
  upsertedCount: 0
}
```

19.

```
[nsdb> db.employees.replaceOne(
... {'ename': 'Deepak'},
... {'emono': 116,
... 'ename': 'Shivansh',
... 'sal': 60000,
... 'dept': {'deptno': 14, 'dname': 'Finance', 'dloc': 'Delhi'},
... 'Desg': 'Manager',
... 'mgr': {'name': 'Ravi', 'num': 113},
... 'project': [{'name': 'Project-5', 'Hrs': 6}]}
... );
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
```

20.

```
[nsdb> db.employees.updateMany(
... {'skillset': 'python'},
... {'$set': {'skillset.$': 'python 3.8'}}
... );
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
```

21.

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

22.

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

23.

```
[nsdb> db.employees.updateMany(
[... {'project.1.Hrs': 4},
[... {$pop: {'hobbies': 1}}
[... ]);
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
```

24.

```
[nsdb> db.employees.updateMany(
[... {'skillset': {$in: ['Perl', 'Python']}},
[... {$push: {'project': {$each: [
[... {'name': 'Project-6', 'Hrs': 2},
[... {'name': 'Project-7', 'Hrs': 5}]}}}
[... ]);
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
```

25.

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