

# NSDB Assignment 1

## ▼ Insert Commands

```
db.Employee.insertMany([
  {
    "empno": 1,
    "ename": "Deepali Vaidya",
    "salary": 40000,
    "dept": {
      "deptno": 12,
      "dname": "HR",
      "dloc": "Mumbai"
    },
    "designation": "Analyst",
    "manager": {
      "name": "satish",
      "num": 111
    },
    "project": [
      {
        "name": "Lambda",
        "hrs": 4
      },
      {
        "name": "alpha",
        "hrs": 8
      }
    ]
  },
  {
    "empno": 2,
    "ename": "John Smith",
    "salary": 55000,
    "dept": {
      "deptno": 10,
      "dname": "Engineering",
      "dloc": "San Francisco"
    },
    "designation": "Software Engineer",
    "manager": {
      "name": "Sarah",
      "num": 112
    },
    "project": [
      {
        "name": "Beta",
        "hrs": 6
      },
      {
        "name": "Gamma",
        "hrs": 10
      }
    ]
  },
  {
    "empno": 3,
    "ename": "Alice Johnson",
    "salary": 60000,
```

```

    "dept": {
      "deptno": 20,
      "dname": "Marketing",
      "dloc": "New York"
    },
    "designation": "Marketing Specialist",
    "manager": {
      "name": "Michael",
      "num": 113
    },
    "project": [
      {
        "name": "Delta",
        "hrs": 5
      },
      {
        "name": "Epsilon",
        "hrs": 7
      }
    ]
  },
  {
    "empno": 4,
    "ename": "Robert Brown",
    "salary": 70000,
    "dept": {
      "deptno": 30,
      "dname": "Finance",
      "dloc": "Chicago"
    },
    "designation": "Financial Analyst",
    "manager": {
      "name": "Emily",
      "num": 114
    },
    "project": [
      {
        "name": "Zeta",
        "hrs": 8
      },
      {
        "name": "Eta",
        "hrs": 9
      }
    ]
  },
  {
    "empno": 5,
    "ename": "Linda Davis",
    "salary": 48000,
    "dept": {
      "deptno": 40,
      "dname": "Operations",
      "dloc": "Los Angeles"
    },
    "designation": "Operations Manager",
    "manager": {
      "name": "David",
      "num": 115
    },
    "project": [
      {
        "name": "Theta",
        "hrs": 3
      },
      {

```

```

        "name": "Iota",
        "hrs": 6
    }
  ]
}
]);
{ acknowledged: true,
  insertedIds:
    { '0': ObjectId("64e5a6bfe1b0c8ea52f33e16"),
      '1': ObjectId("64e5a6bfe1b0c8ea52f33e17"),
      '2': ObjectId("64e5a6bfe1b0c8ea52f33e18"),
      '3': ObjectId("64e5a6bfe1b0c8ea52f33e19"),
      '4': ObjectId("64e5a6bfe1b0c8ea52f33e1a") } }

```

## Answers

### ▼ 1

```

db.Employee.updateMany(
  { "designation": "CLERK" },
  { $set: { "designation": "A0" } }
)

```

### ▼ 2

```

db.Employee.updateMany(
  { "Designation": "Analyst", "project.name": "Project-1" },
  { $set: { "project.Hrs": 5 } }
)

```

### ▼ 3

```

3) db.Employee.updateMany(
  { "ename": /^Deep/ },
  {
    $push: {
      "project": { $each: [{ "name": "project-3", "Hrs": 2 }, { "name": "project-4", "Hrs": 2 } ] }
    }
  }
)

```

### ▼ 4

```

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 } }
);
```

## ▼ 5

```
db.Employee.updateMany(
  { "mgr.name": "Satish" },
  {
    $set: {
      "mgr.name": "Tushar",
      "mgr.num": 3333
    }
  }
);
```

## ▼ 6

```
db.Employee.updateMany(
  { "dept.dname": "purchase department" },
  { $inc: { "sal": 15000 } }
);
```

## ▼ 7

```
db.Employee.updateMany(
  { "project.name": "project-2" },
  { $inc: { "project.$.Hrs": -2 } }
);
```

## ▼ 8

```
db.Employee.updateMany(
  { "project.name": "project-2", "project.Hrs": 4 },
  { $pull: { "project": { "name": "project-2" } } }
);
```

## ▼ 9

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

## ▼ 10

```
db.Employee.updateMany(
  {
```

```

    $or: [
      { "bonus": { $lt: 2000 } },
      { "sal": { $lt: 20000 } },
      { "dept.dname": "sales department" }
    ]
  },
  { $inc: { "bonus": 500 } }
);

```

## ▼ 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
      }
    }
  }
);

```

## ▼ 12

```

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

```

## ▼ 13

```

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

```

## ▼ 14

```

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

```

## ▼ 15

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

## ▼ 16

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

## ▼ 17

```
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 } }
);
```

## ▼ 18

```
db.Employee.updateMany(
  { "project.name": "project-1" },
  { $pull: { "project": { "name": "project-1" } } }
);
```

## ▼ 19

```
db.Employee.replaceOne(
  { "ename": "Deepak" },
  {
    "empno": 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
        }
    ]
}
);

```

## ▼ 20

```

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

```

## ▼ 21

```

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

```

## ▼ 22

```

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

```

## ▼ 23

```

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

```

## ▼ 24

```

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

```

```
}  
);
```

## ▼ 25

```
db.Employee.updateMany(  
  { "project.name": "project-1", "project.Hrs": { $lt: 6 } },  
  { $set: { "project.$.Hrs": 6 } }  
);
```