DATABASE ASSIGNMENT 13

Create a Employee Collection add 5 documents:

Example:

{emono:111,ename:"Deepali
    Vaidya",sal:40000.00,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. All Employee's with the desg as 'CLERK' are now called as (AO)
    Administrative Officers. Update the Employee collection for
    this.

```
test> use iacsd0324
switched to db iacsd0324
iacsd0324> db.employee.updateMany(
...      { desg: "CLERK" },
...      { $set: { desg: "Administrative Officer (AO)" } }
... )
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
iacsd0324>
```

2. Change the number of hours for project-1 to 5 for all employees
    with designation analyst.

```
}
iacsd0324> db.employee.updateMany(
...      { desg: "analyst" },
...      { $set: { "projects.$[elem].Hrs": 5 } },
...      { arrayFilters: [ { "elem.name": "project-1" } ] }
... )
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
```

3. Add 2 projects project-3 and project-4 for employee whose name starts with "Deep" with 2 hrs
db.emp.update({name:/^Deep/},{$push:{project:{$each:[{name:'project-3',Hrs:2},{name:'project-4',Hrs:2}]}}},

{multi:true})

```
iacsd0324> db.emp.update(
...       { name: /^Deep/ },
...       {
...           $push: {
...               projects: {   .
...                   $each: [
...                       { name: 'project-3', Hrs: 2 },
...                       { name: 'project-4', Hrs: 2 }
...                   ]
...               }
...           }
...       },
...       { multi: true }
... )
DeprecationWarning: Collection.update() is deprecated. Use updateOne, updateMany, or bulkWrite.
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
iacsd0324>
```

4. Add bonus rs 2000 for all employees with salary > 50000

```
iacsd0324> db.emp.updateMany(
...       { salary: { $gt: 50000 } },
...       { $inc: { bonus: 2000 } }
... )
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
iacsd0324>
```

5. add bonus 1500 if salary <50000 and > 30000

```
iacsd0324> db.emp.updateMany(
...        { salary: { $gt: 30000, $lt: 50000 } },
...        { $inc: { bonus: 1500 } }
... )
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
iacsd0324>
```

6. add bonus 1000 if salary <=30000

```
iacsd0324> db.emp.updateMany(
...        { salary: { $lte: 30000 } },
...        { $inc: { bonus: 1000 } }
... )
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
iacsd0324>
```

7. Change manager name to Tushar for all employees whose manager is currently "satish"
   And manager number to 3333

```
iacsd0324> db.emp.updateMany(
...        { manager: "satish" },
...        {
...            $set: {
...                "manager": "Tushar",
...                "manager_number": 3333
...            }
...        }
... )
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
iacsd0324>
```

8. Increase salary of all employees from "purchase department" by 15000

```
iacsd0324> db.emp.updateMany(
...      { department: "purchase department" },
...      { $inc: { salary: 15000 } }
... )
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
iacsd0324>
```

9. Decrease number of hrs by 2 for all employees who are working on project-2

```
iacsd0324> db.emp.updateMany(
...      { "projects.name": "project-2" },
...      { $inc: { "projects.$.Hrs": -2 } }
... )
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
iacsd0324>
```

10.   Delete project-2 from all employee document if they are working on the project for 4 hrs.
   db.emp.update({},{$pull:{"project.name":"project-2","project.Hrs":4}},{multi:true})

   or
   db.Emp.update({},{$pull:{project:{name:'project-2',Hrs:4}}},{multi:true}) or

   db.emp.update({},{$pull:{"project:{$elemMatch:{name:"project-2","Hrs":4}},{multi:true})

```
iacsd0324> db.emp.updateMany(
...        { projects: { $elemMatch: { name: "project-2", Hrs: 4 } } },
...        { $pull: { projects: { name: "project-2", Hrs: 4 } } }
... )

{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
iacsd0324>
```

11. Change the salary of employees to 10000 only if their salary is < 10000

```
iacsd0324> db.emp.updateMany(
...        { salary: { $lt: 10000 } },
...        { $set: { salary: 10000 } }
... )

{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
iacsd0324>
```

12. Increase bonus of all employees by 500 if the bonus is <2000 or their salary is < 20000 or if employee belong to sales department

```
iacsd0324> db.emp.updateMany(
...      {
...          $or: [
...              { bonus: { $lt: 2000 } },
...              { salary: { $lt: 20000 } },
...              { department: "sales department" }
...          ]
...      },
...      { $inc: { bonus: 500 } }
... )
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
iacsd0324>
```

13. Add 2 new project at position 2 for all employees with designation analyst or salary is equal to either 30000 or 33000 or 35000

```
iacsd0324> db.emp.updateMany(
...      {
...          $or: [
...              { desg: "analyst" },
...              { salary: { $in: [30000, 33000, 35000] } }
...          ]
...      },
...      {
...          $push: {
...              projects: {
...                  $each: [
...                      { name: "project-3", Hrs: 0 },
...                      { name: "project-4", Hrs: 0 }
...                  ],
...                  $position: 1
...              }
...          }
...      }
... )
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
iacsd0324>
```

14. Delete last project of all employees with department name is "HR" and if the location is Mumbai

```
iacsd0324> db.emp.updateMany(
...      {
...          $or: [
...              { bonus: { $lt: 2000 } },
...              { salary: { $lt: 20000 } },
...              { department: "sales department" }
...          ]
...      },
...      { $inc: { bonus: 500 } }
... )
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
iacsd0324>
```

15. Change designation of all employees to senior programmer if they are working on name:"Project-1" for 4 hrs

```
iacsd0324> db.emp.updateMany(
...      {
...          projects: {
...              $elemMatch: {
...                  name: "Project-1",
...                  Hrs: 4
...              }
...          }
...      },
...      { $set: { desg: "senior programmer" } }
... )
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
iacsd0324>
```

16. Add list of hobbies in all employees document whose manager is Rajan or Revati

```
iacsd0324> db.emp.updateMany(
...        { manager: { $in: ["Rajan", "Revati"] } },
...        { $set: { hobbies: ["reading", "gardening", "cooking"] } } }
... )
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
iacsd0324>
```

17.   Add list of skillset in all employee documents who are
        working on project-4 for 3 hrs or on project-3 for 4 hrs

```
iacsd0324> db.emp.updateMany(
...        {
...            $or: [
...                { "projects.name": "project-4", "projects.Hrs": 3 },
...                { "projects.name": "project-3", "projects.Hrs": 4 }
...            ]
...        },
...        { $set: { skillset: ["communication", "problem-solving", "teamwork"] } } }
... )
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
iacsd0324>
```

18.   Add a new hobby as blogging at 3 position in hobbies
        array for all employess whose name starts with R or p and
        ends with j or s

```
iacsd0324> db.emp.updateMany(
...      {
...          projects: {
...              $elemMatch: {
...                  name: "Project-1",
...                  Hrs: 4
...              }
...          }
...      },
...      { $set: { desg: "senior programmer" } }
... )
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
```

19.   Increase salary by 10000 for all employees who are working on project-2 or project-3 or project-1

```
iacsd0324> db.emp.updateMany(
...      {
...          "projects.name": { $in: ["project-1", "project-2", "project-3"] }
...      },
...      { $inc: { salary: 10000 } }
... )
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
iacsd0324>
```

20.   Remove all employees working on project-1

```
iacsd0324> db.emp.updateMany(
...      { "projects.name": "project-1" },
...      { $pull: { projects: { name: "project-1" } } }
... )
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
```

21.   Replace document of employee with name "Deepak to some
        new document

```
iacsd0324> db.emp.replaceOne(
...      { name: "Deepak" },
...      {
...          // New document here
...          name: "NewName",
...          // Other fields...
...      }
... )
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
iacsd0324>
```

22.   Change skill python to python 3.8 for all employees if python
        is there in the skillset

```
iacsd0324> db.emp.updateMany(
...        { skillset: "python" },
...        { $addToSet: { skillset: "python 3.8" } }
... )
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
iacsd0324>
```

23. Add 2 skills MongoDb and Perl at the end of skillset array
     for all employees who are working at Pune location

```
iacsd0324> db.emp.updateMany(
...        { location: "Pune" },
...        { $push: { skillset: { $each: ["MongoDB", "Perl"] } } } )
... )
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
iacsd0324>
```

24. Delete first hobby from hobby array for all employees who
     are working on project-1 or project-2

```
iacsd0324> db.emp.updateMany(
...        { $or: [{ "projects.name": "project-1" }, { "projects.name": "project-2" }] },
...        { $pull: { hobbies: { $exists: true, $ne: [] } } } }
... )
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
iacsd0324>
```

25. Delete last hobby from hobbies array for all employees who are working on project which is at 2 nd position in projects array for 4 hrs

```
iacsd0324> db.emp.updateMany(
...      { "projects.1.Hrs": 4 },
...      { $pop: { hobbies: 1 } }
... )
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
iacsd0324>
```

26. Add 2 new projects at the end of array for all employees whose skillset contains Perl or python

```
iacsd0324> db.emp.updateMany(
...      { skillset: { $in: ["Perl", "Python"] } },
...      { $push: { projects: { $each: [{ name: "project-5", Hrs: 0 }, { name: "project-6", Hrs: 0 }] } } }
... )
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
iacsd0324>
```