

TE IT

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Create employee collection in company database and insert at least five documents in employee collection containing eid,ename,disignation,hiredate,salary and city.

```
Command Prompt - mongo
> use company
switched to db company
> db.employee.insertOne({eid:1, ename:"Amit", designation:"Salesman", hiredate:new Date("2017-12-17"),
... salary:"20000", city:"Mumbai"})
{
  "acknowledged" : true,
  "insertedId" : ObjectId("5f97b8ff0fa5f3311c3cf5ad")
}
> db.employee.insertOne({eid:2, ename:"Sumit", designation:"Salesman", hiredate:new Date("2019-02-01"),
... salary:"20000", city:"New Delhi"})
{
  "acknowledged" : true,
  "insertedId" : ObjectId("5f97b91f0fa5f3311c3cf5ae")
}
> db.employee.insertOne({eid:3, ename:"Ram", designation:"Engineer", hiredate:new Date("2018-05-11"),
... salary:"40000", city:"Pune"})
{
  "acknowledged" : true,
  "insertedId" : ObjectId("5f97b93d0fa5f3311c3cf5af")
}
> db.employee.insertOne({eid:4, ename:"David", designation:"Engineer", hiredate:new Date("2019-07-26"),
... salary:"40000", city:"Mumbai"})
{
  "acknowledged" : true,
  "insertedId" : ObjectId("5f97b9530fa5f3311c3cf5b0")
}
> db.employee.insertOne({eid:5, ename:"Rohan", designation:"Manager", hiredate:new Date("2016-12-04"),
... salary:"60000", city:"Pune"})
{
  "acknowledged" : true,
  "insertedId" : ObjectId("5f97b9730fa5f3311c3cf5b1")
}
```

And execute following queries on company database. (Assume suitable data)

Add three more documents using batch insert commands.

```
> db.employee.insertMany([{eid:6, ename:"Manoj", designation:"Manager", hiredate:new Date("2017-02-04"),
... salary:"60000", city:"Delhi"}, {eid:7, ename:"Ajit", designation:"CFO", hiredate:new Date("2015-05-25"),
... salary:"80000", city:"Mumbai"}, {eid:8, ename:"Mukesh", designation:"CEO", hiredate:new Date("2015-01-16"),
... salary:"100000", city:"Delhi"}])
{
  "acknowledged" : true,
  "insertedIds" : [
    ObjectId("5f97c4050fa5f3311c3cf5b2"),
    ObjectId("5f97c4050fa5f3311c3cf5b3"),
    ObjectId("5f97c4050fa5f3311c3cf5b4")
  ]
}
```

Update the salary of all employee whose city is Pune.

```
Command Prompt - mongo
> db.employee.updateMany({city:"Pune"},{$set:{salary:"70000"}})
{ "acknowledged" : true, "matchedCount" : 2, "modifiedCount" : 2 }
> db.employee.find().pretty()
{
  "_id" : ObjectId("5f97b8ff0fa5f3311c3cf5ad"),
  "eid" : 1,
  "ename" : "Amit",
  "designation" : "Salesman",
  "hiredate" : ISODate("2017-12-17T00:00:00Z"),
  "salary" : "20000",
  "city" : "Mumbai"
}
{
  "_id" : ObjectId("5f97b91f0fa5f3311c3cf5ae"),
  "eid" : 2,
  "ename" : "Sumit",
  "designation" : "Salesman",
  "hiredate" : ISODate("2019-02-01T00:00:00Z"),
  "salary" : "20000",
  "city" : "New Delhi"
}
{
  "_id" : ObjectId("5f97b93d0fa5f3311c3cf5af"),
  "eid" : 3,
  "ename" : "Ram",
  "designation" : "Engineer",
  "hiredate" : ISODate("2018-05-11T00:00:00Z"),
  "salary" : "70000",
  "city" : "Pune"
}
{
  "_id" : ObjectId("5f97b9530fa5f3311c3cf5b0"),
  "eid" : 4,
  "ename" : "David",
  "designation" : "Engineer",
  "hiredate" : ISODate("2019-07-26T00:00:00Z"),
  "salary" : "70000",
  "city" : "Pune"
}
{
  "_id" : ObjectId("5f97b9730fa5f3311c3cf5b1"),
  "eid" : 5,
  "ename" : "Rohan",
  "designation" : "Manager",
  "hiredate" : ISODate("2016-12-04T00:00:00Z"),
  "salary" : "70000",
  "city" : "Pune"
}
{
  "_id" : ObjectId("5f97c4050fa5f3311c3cf5b2"),
  "eid" : 6,
  "ename" : "Manoj",
  "designation" : "Manager",
  "hiredate" : ISODate("2017-02-04T00:00:00Z"),
  "salary" : "60000",
  "city" : "Delhi"
}
{
  "_id" : ObjectId("5f97c4050fa5f3311c3cf5b3"),
  "eid" : 7,
  "ename" : "Ajit",
  "designation" : "CFO",
  "hiredate" : ISODate("2015-05-25T00:00:00Z"),
  "salary" : "80000",
  "city" : "Mumbai"
}
{
  "_id" : ObjectId("5f97c4050fa5f3311c3cf5b4"),
  "eid" : 8,
  "ename" : "Mukesh",
  "designation" : "CEO",
  "hiredate" : ISODate("2015-01-16T00:00:00Z"),
  "salary" : "100000",
  "city" : "Delhi"
}
```

Add the skills of all employee using array concept in MongoDB.

```
Command Prompt - mongo
> db.employee.update({eid:1},{push:{skills:["C"]}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> db.employee.update({eid:2},{push:{skills:["C","C++"]}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> db.employee.update({eid:3},{push:{skills:["C","C++","Java"]}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> db.employee.update({eid:4},{push:{skills:["C++","Java"]}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> db.employee.update({eid:5},{push:{skills:["C","Java","Python"]}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> db.employee.update({eid:6},{push:{skills:["C","Java","Python","R"]}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> db.employee.update({eid:7},{push:{skills:["C","C++","Java","Python","R"]}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> db.employee.update({eid:8},{push:{skills:["C","C++","Python","R","Kotlin"]}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> db.employee.find().pretty()
{
  "_id" : ObjectId("5f97b8ff0fa5f3311c3cf5ad"),
  "eid" : 1,
  "ename" : "Amit",
  "designation" : "Salesman",
  "hiredate" : ISODate("2017-12-17T00:00:00Z"),
  "salary" : "20000",
  "city" : "Mumbai",
  "skills" : [
    "C"
  ]
}
{
  "_id" : ObjectId("5f97b91f0fa5f3311c3cf5ae"),
  "eid" : 2,
  "ename" : "Sumit",
  "designation" : "Salesman",
  "hiredate" : ISODate("2019-02-01T00:00:00Z"),
  "salary" : "20000",
  "city" : "New Delhi",
  "skills" : [
    "C",
    "C++"
  ]
}
{
  "_id" : ObjectId("5f97b93d0fa5f3311c3cf5af"),
  "eid" : 3,
  "ename" : "Ram",
```

```
Command Prompt - mongo
  "eid" : 3,
  "ename" : "Ram",
  "designation" : "Engineer",
  "hiredate" : ISODate("2018-05-11T00:00:00Z"),
  "salary" : "70000",
  "city" : "Pune",
  "skills" : [
    "C",
    "C++",
    "Java"
  ]
}

{
  "_id" : ObjectId("5f97b9530fa5f3311c3cf5b0"),
  "eid" : 4,
  "ename" : "David",
  "designation" : "Engineer",
  "hiredate" : ISODate("2019-07-26T00:00:00Z"),
  "salary" : "40000",
  "city" : "Mumbai",
  "skills" : [
    "C++",
    "Java"
  ]
}

{
  "_id" : ObjectId("5f97b9730fa5f3311c3cf5b1"),
  "eid" : 5,
  "ename" : "Rohan",
  "designation" : "Manager",
  "hiredate" : ISODate("2016-12-04T00:00:00Z"),
  "salary" : "70000",
  "city" : "Pune",
  "skills" : [
    "C",
    "Java",
    "Python"
  ]
}

{
  "_id" : ObjectId("5f97c4050fa5f3311c3cf5b2"),
  "eid" : 6,
  "ename" : "Manoj",
```

```
Command Prompt - mongo
{
  "_id" : ObjectId("5f97c4050fa5f3311c3cf5b2"),
  "eid" : 6,
  "ename" : "Manoj",
  "designation" : "Manager",
  "hiredate" : ISODate("2017-02-04T00:00:00Z"),
  "salary" : "60000",
  "city" : "Delhi",
  "skills" : [
    [
      "C",
      "Java",
      "Python",
      "R"
    ]
  ]
}

{
  "_id" : ObjectId("5f97c4050fa5f3311c3cf5b3"),
  "eid" : 7,
  "ename" : "Ajit",
  "designation" : "CFO",
  "hiredate" : ISODate("2015-05-25T00:00:00Z"),
  "salary" : "80000",
  "city" : "Mumbai",
  "skills" : [
    [
      "C",
      "C++",
      "Java",
      "Python",
      "R"
    ]
  ]
}

{
  "_id" : ObjectId("5f97c4050fa5f3311c3cf5b4"),
  "eid" : 8,
  "ename" : "Mukesh",
  "designation" : "CEO",
  "hiredate" : ISODate("2015-01-16T00:00:00Z"),
  "salary" : "100000",
  "city" : "Delhi",
  "skills" : [
    [
      "C",
      "C++",
      "Python",
      "R",
      "Kotlin"
    ]
  ]
}
```

Delete all employee from employee collection whose hiredate is 01/02/2019.

```
Command Prompt - mongo
> db.employee.deleteMany({hiredate:new Date("2019-02-01")})
{ "acknowledged" : true, "deletedCount" : 1 }
> db.employee.find().pretty()
{
  "_id" : ObjectId("5f97b8ff0fa5f3311c3cf5ad"),
  "eid" : 1,
  "ename" : "Amit",
  "designation" : "Salesman",
  "hiredate" : ISODate("2017-12-17T00:00:00Z"),
  "salary" : "20000",
  "city" : "Mumbai",
  "skills" : [
    [
      "C"
    ]
  ]
}

{
  "_id" : ObjectId("5f97b93d0fa5f3311c3cf5af"),
  "eid" : 3,
  "ename" : "Ram",
  "designation" : "Engineer",
  "hiredate" : ISODate("2018-05-11T00:00:00Z"),
  "salary" : "70000",
  "city" : "Pune",
  "skills" : [
    [
      "C",
      "C++",
      "Java"
    ]
  ]
}

{
  "_id" : ObjectId("5f97b9530fa5f3311c3cf5b0"),
  "eid" : 4,
  "ename" : "David",
  "designation" : "Engineer",
  "hiredate" : ISODate("2019-07-26T00:00:00Z"),
  "salary" : "40000",
  "city" : "Mumbai",
  "skills" : [
    [
      "C++",
      "Java"
    ]
  ]
}
```

```
Command Prompt - mongo
{
  "_id" : ObjectId("5f97c4050fa5f3311c3cf5b4"),
  "eid" : 8,
  "ename" : "Mukesh",
  "designation" : "CEO",
  "hiredate" : ISODate("2015-01-16T00:00:00Z"),
  "salary" : "100000",
  "city" : "Delhi",
  "skills" : [
    [
      "C",
      "C++",
      "Python",
      "R",
      "Kotlin"
    ]
  ]
}
```

Delete skills of all employee whose designation is salesman.

```

Command Prompt - mongo
> db.employee.update({designation:"Salesman"},{$unset:{skills:""}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> db.employee.find().pretty()
{
  "_id" : ObjectId("5f97b8ff0fa5f3311c3cf5ad"),
  "eid" : 1,
  "ename" : "Amit",
  "designation" : "Salesman",
  "hiredate" : ISODate("2017-12-17T00:00:00Z"),
  "salary" : "20000",
  "city" : "Mumbai"
}

```

Update the employee skills of employee id is 1 with java and python.

```

Command Prompt - mongo
> db.employee.update({eid:1},{set:{skills:["Java","Python"]}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> db.employee.find().pretty()
{
  "_id" : ObjectId("5f97b8ff0fa5f3311c3cf5ad"),
  "eid" : 1,
  "ename" : "Amit",
  "designation" : "Salesman",
  "hiredate" : ISODate("2017-12-17T00:00:00Z"),
  "salary" : "20000",
  "city" : "Mumbai",
  "skills" : [
    "Java",
    "Python"
  ]
}

```

Remove City of all employees whose designation is salesman.

```

Command Prompt - mongo
> db.employee.update({designation:"Salesman"},{$unset:{city:""}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> db.employee.find().pretty()
{
  "_id" : ObjectId("5f97b8ff0fa5f3311c3cf5ad"),
  "eid" : 1,
  "ename" : "Amit",
  "designation" : "Salesman",
  "hiredate" : ISODate("2017-12-17T00:00:00Z"),
  "salary" : "20000",
  "skills" : [
    "Java",
    "Python"
  ]
}

```

Display all databases present in MongoDB database Management System.

```

Command Prompt - mongo
> show dbs
admin    0.000GB
company  0.000GB
config   0.000GB
local    0.000GB
shop     0.000GB
> 

```

Display all collections that are present in company collection.

```

> show collections
employee
> 

```

Delete skills of employee id is 5 from employee collection.

```
Command Prompt - mongo
> db.employee.update({eid:5},{ $unset:{skills:""}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> db.employee.find().pretty()
{
  "_id" : ObjectId("5f97b8ff0fa5f3311c3cf5ad"),
  "eid" : 1,
  "ename" : "Amit",
  "designation" : "Salesman",
  "hiredate" : ISODate("2017-12-17T00:00:00Z"),
  "salary" : "20000",
  "skills" : [
    "Java",
    "Python"
  ]
}
{
  "_id" : ObjectId("5f97b93d0fa5f3311c3cf5af"),
  "eid" : 3,
  "ename" : "Ram",
  "designation" : "Engineer",
  "hiredate" : ISODate("2018-05-11T00:00:00Z"),
  "salary" : "70000",
  "city" : "Pune",
  "skills" : [
    "C",
    "C++",
    "Java"
  ]
}
{
  "_id" : ObjectId("5f97b9530fa5f3311c3cf5b0"),
  "eid" : 4,
  "ename" : "David",
  "designation" : "Engineer",
```

```
Command Prompt - mongo
{
  "_id" : ObjectId("5f97b9530fa5f3311c3cf5b0"),
  "eid" : 4,
  "ename" : "David",
  "designation" : "Engineer",
  "hiredate" : ISODate("2019-07-26T00:00:00Z"),
  "salary" : "40000",
  "city" : "Mumbai",
  "skills" : [
    "C++",
    "Java"
  ]
}
{
  "_id" : ObjectId("5f97b9730fa5f3311c3cf5b1"),
  "eid" : 5,
  "ename" : "Rohan",
  "designation" : "Manager",
  "hiredate" : ISODate("2016-12-04T00:00:00Z"),
  "salary" : "70000",
  "city" : "Pune"
}
```

Update the city of all employees.

```
Command Prompt - mongo
db.employee.updateMany({},{$set:{city:"Bangalore"}})
"acknowledged" : true, "matchedCount" : 7, "modifiedCount" : 7 }
db.employee.find().pretty()

  "_id" : ObjectId("5f97b8ff0fa5f3311c3cf5ad"),
  "eid" : 1,
  "ename" : "Amit",
  "designation" : "Salesman",
  "hiredate" : ISODate("2017-12-17T00:00:00Z"),
  "salary" : "20000",
  "skills" : [
    "Java",
    "Python"
  ],
  "city" : "Bangalore"

  "_id" : ObjectId("5f97b93d0fa5f3311c3cf5af"),
  "eid" : 3,
  "ename" : "Ram",
  "designation" : "Engineer",
  "hiredate" : ISODate("2018-05-11T00:00:00Z"),
  "salary" : "70000",
  "city" : "Bangalore",
  "skills" : [
    [
      "C",
      "C++",
      "Java"
    ]
  ]

  "_id" : ObjectId("5f97b9530fa5f3311c3cf5b0"),
  "eid" : 4,
  "ename" : "David",
  "designation" : "Engineer",
  "hiredate" : ISODate("2019-07-26T00:00:00Z"),
  "salary" : "40000",
  "city" : "Bangalore",
  "skills" : [
    [
      "C++",
      "Java"
    ]
  ]
}
```

```
Command Prompt - mongo

  "eid" : 5,
  "ename" : "Rohan",
  "designation" : "Manager",
  "hiredate" : ISODate("2016-12-04T00:00:00Z"),
  "salary" : "70000",
  "city" : "Bangalore"

  "_id" : ObjectId("5f97c4050fa5f3311c3cf5b2"),
  "eid" : 6,
  "ename" : "Manoj",
  "designation" : "Manager",
  "hiredate" : ISODate("2017-02-04T00:00:00Z"),
  "salary" : "60000",
  "city" : "Bangalore",
  "skills" : [
    [
      "C",
      "Java",
      "Python",
      "R"
    ]
  ]

  "_id" : ObjectId("5f97c4050fa5f3311c3cf5b3"),
  "eid" : 7,
  "ename" : "Ajit",
  "designation" : "CFO",
  "hiredate" : ISODate("2015-05-25T00:00:00Z"),
  "salary" : "80000",
  "city" : "Bangalore",
  "skills" : [
    [
      "C",
      "C++",
      "Java",
      "Python",
      "R"
    ]
  ]

  "_id" : ObjectId("5f97c4050fa5f3311c3cf5b4"),
  "eid" : 8,
  "ename" : "Mukesh",
  "designation" : "CEO",
  "hiredate" : ISODate("2015-01-16T00:00:00Z"),
  "salary" : "100000",
  "city" : "Bangalore",
}
```

Delete employee collection from company database.

```
Command Prompt - mongo
> db.employee.drop()
true
```