

Create a database by name employee

Query:

```
use employee
```

Output:

```
switched to db employee
```

Question 2

Create a collection by name employee_info

Query:

```
db.createCollection("employee_info")
```

Output:

```
{ ok: 1 }
```

Question 3

Insert values into the collection (Batch Insert)

Query:

```
db.employee_info.insertMany([
  { Emp_Id: 120, Emp_Name: "Asha", Designation: "Manager", Date_Of_Joining:
    ISODate("2021-04-01"), Salary: 30000, Dept_Name: "CSE" },
  { Emp_Id: 121, Emp_Name: "Kiran", Designation: "Emp", Date_Of_Joining:
    ISODate("2019-04-20"), Salary: 20000, Dept_Name: "CSE" },
  { Emp_Id: 122, Emp_Name: "Tarun", Designation: "Emp", Date_Of_Joining:
    ISODate("2019-05-01"), Salary: 22000, Dept_Name: "CSE" },
  { Emp_Id: 123, Emp_Name: "Samarth", Designation: "Emp", Date_Of_Joining:
    ISODate("2020-08-01"), Salary: 22500, Dept_Name: "CSE" },
  { Emp_Id: 124, Emp_Name: "Rohan", Designation: "Emp", Date_Of_Joining:
    ISODate("2019-06-01"), Salary: 21000, Dept_Name: "CSE" }
])
```

Output:

```
{
  acknowledged: true,
  insertedIds: {
    '0': ObjectId('6985ab7211859607c11e2621'),
    '1': ObjectId('6985ab7211859607c11e2622'),
    '2': ObjectId('6985ab7211859607c11e2623'),
    '3': ObjectId('6985ab7211859607c11e2624'),
    '4': ObjectId('6985ab7211859607c11e2625')
  }
}
```

Question 4

Update Employee Name & Department of Emp_Id = 121

Query:

```
db.employee_info.updateOne(  
  { Emp_Id: 121 },  
  { $set: { Emp_Name: "David", Dept_Name: "ECE" } }  
)
```

Output:

```
{ acknowledged: true, matchedCount: 1, modifiedCount: 1 }
```

Question 5

Sort Employee Records Based on Salary (Ascending)

Query:

```
db.employee_info.find().sort({ Salary: 1 })
```

Output:

```
upsertedCount: 0  
}  
employee> db.employee_info.find().sort({ Salary: 1 })  
[  
  {  
    _id: ObjectId('6985ab7211859607c11e2622'),  
    Emp_Id: 121,  
    Emp_Name: 'David',  
    Designation: 'Emp',  
    Date_Of_Joining: ISODate('2019-04-20T00:00:00.000Z'),  
    Salary: 20000,  
    Dept_Name: 'ECE'  
  },  
  {  
    _id: ObjectId('6985ab7211859607c11e2625'),  
    Emp_Id: 124,  
    Emp_Name: 'Rohan',  
    Designation: 'Emp',  
    Date_Of_Joining: ISODate('2019-06-01T00:00:00.000Z'),  
    Salary: 21000,  
    Dept_Name: 'CSE'  
  },  
  {  
    _id: ObjectId('6985ab7211859607c11e2623'),  
    Emp_Id: 122,  
    Emp_Name: 'Tarun',  
    Designation: 'Emp',  
    Date_Of_Joining: ISODate('2019-05-01T00:00:00.000Z'),  
    Salary: 22000,  
    Dept_Name: 'CSE'  
  },  
  {  
    _id: ObjectId('6985ab7211859607c11e2624'),  
    Emp_Id: 123,  
    Emp_Name: 'Samarth',  
    Designation: 'Emp',  
    Date_Of_Joining: ISODate('2020-08-01T00:00:00.000Z'),  
    Salary: 22500,  
    Dept_Name: 'CSE'  
  },  
  {  
    _id: ObjectId('6985ab7211859607c11e2621'),  
    Emp_Id: 120,  
    Emp_Name: 'Asha',  
    Designation: 'Manager',  
    Date_Of_Joining: ISODate('2021-04-01T00:00:00.000Z'),  
    Salary: 30000,  
    Dept_Name: 'CSE'  
  }  
]
```

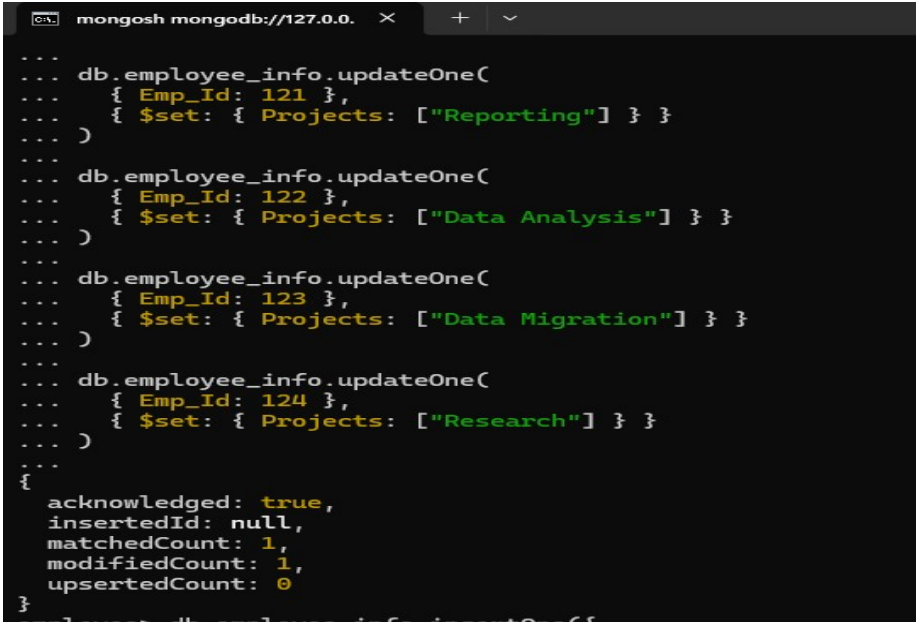
Question 6 & 7

Add & Update Projects Field

Queries:

```
db.employee_info.updateOne({ Emp_Id: 120 }, { $set: { Projects: ["Research"] } })
db.employee_info.updateOne({ Emp_Id: 121 }, { $set: { Projects: ["Reporting"] } })
db.employee_info.updateOne({ Emp_Id: 122 }, { $set: { Projects: ["Data Analysis"] } })
db.employee_info.updateOne({ Emp_Id: 123 }, { $set: { Projects: ["Data Migration"] } })
db.employee_info.updateOne({ Emp_Id: 124 }, { $set: { Projects: ["Research"] } })
```

Output



```
mongosh mongodb://127.0.0.1:27020/employee_db
> db.employee_info.updateOne(
  { Emp_Id: 121 },
  { $set: { Projects: ["Reporting"] } }
)
{ acknowledged: true, insertedId: null, matchedCount: 1, modifiedCount: 1, upsertedCount: 0 }
> db.employee_info.updateOne(
  { Emp_Id: 122 },
  { $set: { Projects: ["Data Analysis"] } }
)
{ acknowledged: true, insertedId: null, matchedCount: 1, modifiedCount: 1, upsertedCount: 0 }
> db.employee_info.updateOne(
  { Emp_Id: 123 },
  { $set: { Projects: ["Data Migration"] } }
)
{ acknowledged: true, insertedId: null, matchedCount: 1, modifiedCount: 1, upsertedCount: 0 }
> db.employee_info.updateOne(
  { Emp_Id: 124 },
  { $set: { Projects: ["Research"] } }
)
{ acknowledged: true, insertedId: null, matchedCount: 1, modifiedCount: 1, upsertedCount: 0 }
```

Question 8

Insert Record with TTL = 15 Seconds

Query:

```
db.employee_info.insertOne({
  Emp_Id: 125,
  Emp_Name: "Any",
  Designation: "Emp",
  Date_Of_Joining: ISODate("2021-04-01"),
  TTL: 15
```

```

Salary: 25000,
Dept_Name: "CSE",
expireAt: new Date(Date.now() + 15000)
})
db.employee_info.createIndex({ expireAt: 1 }, { expireAfterSeconds: 0 })

```

Output:

```

...
{
  acknowledged: true,
  insertedId: ObjectId('6985b0a511859607c11e2626')
}
employee> db.employee_info.createIndex(
...   { expireAt: 1 },
...   { expireAfterSeconds: 0 }
... )
...
expireAt_1
employee> db.employee_info.find()
[

```

db.employee_info.find()

```

mongosh mongodb://127.0.0.1:27020
...
expireAt_1
employee> db.employee_info.find()
[
  {
    _id: ObjectId('6985ab7211859607c11e2621'),
    Emp_Id: 120,
    Emp_Name: 'Asha',
    Designation: 'Manager',
    Date_Of_Joining: ISODate('2021-04-01T00:00:00.000Z'),
    Salary: 30000,
    Dept_Name: 'CSE',
    Projects: [ 'Research' ]
  },
  {
    _id: ObjectId('6985ab7211859607c11e2622'),
    Emp_Id: 121,
    Emp_Name: 'David',
    Designation: 'Emp',
    Date_Of_Joining: ISODate('2019-04-20T00:00:00.000Z'),
    Salary: 20000,
    Dept_Name: 'ECE',
    Projects: [ 'Reporting' ]
  },
  {
    _id: ObjectId('6985ab7211859607c11e2623'),
    Emp_Id: 122,
    Emp_Name: 'Tarun',
    Designation: 'Emp',
    Date_Of_Joining: ISODate('2019-05-01T00:00:00.000Z'),
    Salary: 22000,
    Dept_Name: 'CSE',
    Projects: [ 'Data Analysis' ]
  },
  {
    _id: ObjectId('6985ab7211859607c11e2624'),
    Emp_Id: 123,
    Emp_Name: 'Samarth',
    Designation: 'Emp',
    Date_Of_Joining: ISODate('2020-08-01T00:00:00.000Z'),
    Salary: 22500,
    Dept_Name: 'CSE',
    Projects: [ 'Data Migration' ]
  },
  {
    _id: ObjectId('6985ab7211859607c11e2625'),
    Emp_Id: 124,
    Emp_Name: 'Rohan',
    Designation: 'Emp',
    Date_Of_Joining: ISODate('2019-06-01T00:00:00.000Z'),
    Salary: 21000,

```

