MongoDB CRUD operations, Create collection Employee consisting of Emp_id, Emp_Name, Emp_salary, Emp_Dept.

Insert 10 Documents in the collection.

collection> db.createCollection("employee");

{ ok: 1 }

collection> db.employee.insert({"empid":"E1007","emp_name":"atharvaa","empsalary":60000,"empdept":"computer"});

DeprecationWarning: Collection.insert() is deprecated. Use insertOne, insertMany, or bulkWrite.

{

  acknowledged: true,

  insertedIds: { '0': ObjectId("65453d8b34cc437038bf5592") }

}

collection> db.employee.insert({"empid":"E1006","emp_name":"ram","empsalary":30000,"empdept":"marketing"});

{

  acknowledged: true,

  insertedIds: { '0': ObjectId("65453db434cc437038bf5593") }

}

collection> db.employee.insert({"empid":"E1005","emp_name":"sham","empsalary":35000,"empdept":"marketing"});

{

  acknowledged: true,

  insertedIds: { '0': ObjectId("65453eec34cc437038bf5594") }

}

collection> db.employee.insert({"empid":"E1004","emp_name":"smith","empsalary":20000,"empdept":"accountant"});

```
{

  acknowledged: true,

  insertedIds: { '0': ObjectId("65453f1634cc437038bf5595") }

}
collection> db.employee.insert({"empid":"E1008","emp_name":"carl","empsalary":70000,"empdept":"computer"});

{

  acknowledged: true,

  insertedIds: { '0': ObjectId("65453f5434cc437038bf5596") }

}
collection> db.employee.insert({"empid":"E1009","emp_name":"chris","empsalary":80000,"empdept":"computer"});

{

  acknowledged: true,

  insertedIds: { '0': ObjectId("65453f6b34cc437038bf5597") }

}
collection> db.employee.insert({"empid":"E1010","emp_name":"cole","empsalary":20000,"empdept":"marketing"});

{

  acknowledged: true,

  insertedIds: { '0': ObjectId("65453f9234cc437038bf5598") }

}
collection> db.employee.find().pretty()

[

  {

    _id: ObjectId("65453d8b34cc437038bf5592"),
```

```
    empid: 'E1007',

    emp_name: 'atharvaa',

    empsalary: 60000,

    empdept: 'computer'

  },

  {

    _id: ObjectId("65453db434cc437038bf5593"),

    empid: 'E1006',

    emp_name: 'ram',

    empsalary: 30000,

    empdept: 'marketing'

  },

  {

    _id: ObjectId("65453eec34cc437038bf5594"),

    empid: 'E1005',

    emp_name: 'sham',

    empsalary: 35000,

    empdept: 'marketing'

  },

  {

    _id: ObjectId("65453f1634cc437038bf5595"),

    empid: 'E1004',

    emp_name: 'smith',

    empsalary: 20000,

    empdept: 'accountant'

  },

  {
```

```
    _id: ObjectId("65453f5434cc437038bf5596"),

    empid: 'E1008',

    emp_name: 'carl',

    empsalary: 70000,

    empdept: 'computer'

  },

  {

    _id: ObjectId("65453f6b34cc437038bf5597"),

    empid: 'E1009',

    emp_name: 'chris',

    empsalary: 80000,

    empdept: 'computer'

  },

  {

    _id: ObjectId("65453f9234cc437038bf5598"),

    empid: 'E1010',

    emp_name: 'cole',

    empsalary: 20000,

    empdept: 'marketing'

  }

]

collection> db.employee.find({empsalary:{$gt:50000}})

[

  {

    _id: ObjectId("65453d8b34cc437038bf5592"),

    empid: 'E1007',

    emp_name: 'atharvaa',
```

```
    empsalary: 60000,

    empdept: 'computer'

  },

  {

    _id: ObjectId("65453f5434cc437038bf5596"),

    empid: 'E1008',

    emp_name: 'carl',

    empsalary: 70000,

    empdept: 'computer'

  },

  {

    _id: ObjectId("65453f6b34cc437038bf5597"),

    empid: 'E1009',

    emp_name: 'chris',

    empsalary: 80000,

    empdept: 'computer'

  }

]
```

Find the employees whose salary is greater than 50000 Rs.

```
collection> db.employee.find({empsalary:{$gt:50000}})

[

  {

    _id: ObjectId("65453d8b34cc437038bf5592"),

    empid: 'E1007',

    emp_name: 'atharvaa',

    empsalary: 60000,

    empdept: 'computer'
```

```
    },

    {

      _id: ObjectId("65453f5434cc437038bf5596"),

      empid: 'E1008',

      emp_name: 'carl',

      empsalary: 70000,

      empdept: 'computer'

    },

    {

      _id: ObjectId("65453f6b34cc437038bf5597"),

      empid: 'E1009',

      emp_name: 'chris',

      empsalary: 80000,

      empdept: 'computer'

    }

]
```

Increase the salary of Smith by 5000 Rs

collection> db.employee.updateOne({name:"smith"},{$inc:{empsalary:5000}});

Display the information of employees working in Marketing department.with less than 45000 salary .

collection> db.employee.find({empdept:"marketing",empsalary:{$lt:35000}})

```
[

  {

    _id: ObjectId("65453db434cc437038bf5593"),

    empid: 'E1006',

    emp_name: 'ram',

    empsalary: 30000,
```

empdept: 'marketing'

  },

  {

    _id: ObjectId("65453f9234cc437038bf5598"),

    empid: 'E1010',

    emp_name: 'cole',

    empsalary: 20000,

    empdept: 'marketing'

  }

]

Display first five highest paid employees

collection> db.employee.find().sort({empsalary:-1}).limit(3);

Delete Employee with Id 'E1007'

collection> db.employee.deleteOne({empid:"E1007"});

Create an Index on Emp_Id field , compare the time require to search Emp_id 'E10008' before and after creating an index. (Hint Add at least 10000 Documents)

collection> db.employee.createIndex({empid:1})

collection> db.employee.getIndexes();

[

 { v: 2, key: { _id: 1 }, name: '_id_' },

 { v: 2, key: { empid: 1 }, name: 'empid_1' }

]

//Indexes kalta