Step 1,2: Create a database sms in mongodb.
Create collection student with fields Name,dateofbirth,city,qualification,email,phone.
Insert one student document.

Query : db.student.insertOne({
  _id: 's001',
  name: 'rajesh',
  dateofbirth: new Date('1980-12-17'),
  city: 'kolkata',
  qualification: 'graduate',
  email: 'rajesh@gmail.com',
  phone: '09830978900'
})

```
> db.student.insertOne({
    _id: 's001',
    name: 'rajesh',
    dateofbirth: new Date('1980-12-17'),
    city: 'kolkata',
    qualification: 'graduate',
    email: 'rajesh@gmail.com',
    phone: '09830978900'
  })
< {
    acknowledged: true,
    insertedId: 's001'
  }
```

Step 3 : Insert these values into student collection.
's001','rajesh','1980-12-17','kolkata','graduate','rajesh@gmail.com','09830978900'
's002','john','1949-1-7','hyderabad','postgraduate','john@yahoo.com','9833978933'
's003','kunal','1967-2-3','pune','postgraduate','kunal@gmail.com','09830922900'
's004','maya','1990-12-17','kolkata','graduate','maya.com','09830765900'
's005','jadeja','1940-1-23','kolkata','postgraduate','jadeja@yahoo.com','09837865432'

Query : db.student.insertMany([
 {
  _id: 's002',
  name: 'john',
  dateofbirth: new Date('1949-01-07'),

```
  city: 'hyderabad',
  qualification: 'postgraduate',
  email: 'john@yahoo.com',
  phone: '9833978933'
},
{
  _id: 's003',
  name: 'kunal',
  dateofbirth: new Date('1967-02-03'),
  city: 'pune',
  qualification: 'postgraduate',
  email: 'kunal@gmail.com',
  phone: '09830922900'
},
{
  _id: 's004',
  name: 'maya',
  dateofbirth: new Date('1990-12-17'),
  city: 'kolkata',
  qualification: 'graduate',
  email: 'maya.com',
  phone: '09830765900'
},
{
  _id: 's005',
  name: 'jadeja',
  dateofbirth: new Date('1940-01-23'),
  city: 'kolkata',
  qualification: 'postgraduate',
  email: 'jadeja@yahoo.com',
  phone: '09837865432'
}
```

```
    {
      _id: 's005',
      name: 'jadeja',
      dateofbirth: new Date('1940-01-23'),
      city: 'kolkata',
      qualification: 'postgraduate',
      email: 'jadeja@yahoo.com',
      phone: '09837865432'
    }
  ])
< {
    acknowledged: true,
    insertedIds: {
      '0': 's002',
      '1': 's003',
      '2': 's004',
      '3': 's005'
    }
```

```
])
```

Step 4 : Use query operators to find
i) Students from city kolkata

Query : db.student.find({
  city:"kolkata"
})

Step 5 : Use query operators to find
ii) Postgraduate students

Query : db.student.find({
  qualification:"postgraduate"
})

```
{
  _id: 's002',
  name: 'john',
  dateofbirth: 1949-01-07T00:00:00.000Z,
  city: 'hyderabad',
  qualification: 'postgraduate',
  email: 'john@yahoo.com',
  phone: '9833978933'
}
{
  _id: 's003',
  name: 'kunal',
  dateofbirth: 1967-02-03T00:00:00.000Z,
  city: 'pune',
  qualification: 'postgraduate',
  email: 'kunal@gmail.com',
  phone: '09830922900'
}
{
  _id: 's005',
  name: 'jadeja',
  dateofbirth: 1940-01-23T00:00:00.000Z,
  city: 'kolkata',
  qualification: 'postgraduate',
  email: 'jadeja@yahoo.com',
  phone: '09837865432'
}
```


Step 6 : Use query operators to find
iii)Find number of students in each city

Query : db.student.aggregate([{
  $group:{
    _id:"$city",
    studentCount:{$sum:1}
  }
}])

```
{
  _id: 'kolkata',
  studentCount: 3
}
{
  _id: 'hyderabad',
  studentCount: 1
}
{
  _id: 'pune',
  studentCount: 1
}
```

Step 7 : Use query operators to find
iv) Sort students based on name.

Query : db.student.find().sort({name: 1})

```
>_MONGOSH
{
  _id: 's005',
  name: 'jadeja',
  dateofbirth: 1940-01-23T00:00:00.000Z,
  city: 'kolkata',
  qualification: 'postgraduate',
  email: 'jadeja@yahoo.com',
  phone: '09837865432'
}
{
  _id: 's002',
  name: 'john',
  dateofbirth: 1949-01-07T00:00:00.000Z,
  city: 'hyderabad',
  qualification: 'postgraduate',
  email: 'john@yahoo.com',
  phone: '9833978933'
}
{
  _id: 's003',
  name: 'kunal',
  dateofbirth: 1967-02-03T00:00:00.000Z,
  city: 'pune',
  qualification: 'postgraduate',
  email: 'kunal@gmail.com',
  phone: '09830922900'
}
{
  _id: 's004',
  name: 'maya',
  dateofbirth: 1990-12-17T00:00:00.000Z,
  city: 'kolkata',
  qualification: 'graduate',
  email: 'maya.com',
  phone: '09830765900'
}
{
  _id: 's001',
  name: 'rajesh',
  dateofbirth: 1980-12-17T00:00:00.000Z,
  city: 'kolkata',
  qualification: 'graduate',
```