1. Create a database sms in mongodb.

Use SMS

2. Create collection student with fields
Name,dateofbirth,city,qualification,email,phone.

3. Insert one student document.

4. Insert these values into student collection.

```
db.Student.insertMany([{
  _id:"S001",
  name:"rajesh",
  DOB:"1980-12-17",
  city:"kolkata",
  qualification:"graduate",
  email:"rajesh@gmail.com",
  phone:"09830978900"
},
{
  _id:"S002",
  name:"john",
  DOB:"1949-1-7",
  city:"hyderabad",
  qualification:"postgraduate",
  email:"john@yahoo.com",
  phone:"9833978933"
},
{
  _id:"S003",
  name:"kunal",
  DOB:"1967-2-3",
  city:"pune",
  qualification:"postgraduate",
  email:"kunal@gmail.com",
  phone:"09830922900"
},
{
  _id:"S004",
  name:"maya",
  DOB:"1990-12-17",
  city:"kolkata",
  qualification:"graduate",
  email:"maya.com",
  phone:"09830765900"
},
```

```
{
  _id:"S005",
  name:"jadeja",
  DOB:"1940-1-23",
  city:"kolkata",
  qualification:"postgraduate",
  email:"jadeja@yahoo.com",
  phone:"09837865432"
}   ])
```

```
< {
    _id: 'S001',
    name: 'rajesh',
    DOB: '1980-12-17',
    city: 'kolkata',
    qualification: 'graduate',
    email: 'rajesh@gmail.com',
    phone: '09830978900'
  }
  {
    _id: 'S002',
    name: 'john',
    DOB: '1949-1-7',
    city: 'hyderabad',
    qualification: 'postgraduate',
    email: 'john@yahoo.com',
    phone: '9833978933'
  }
  {
    _id: 'S003',
    name: 'kunal',
    DOB: '1967-2-3',
    city: 'pune',
    qualification: 'postgraduate',
    email: 'kunal@gmail.com',
    phone: '09830922900'
  }
```

```
{
  _id: 'S004',
  name: 'maya',
  DOB: '1990-12-17',
  city: 'kolkata',
  qualification: 'graduate',
  email: 'maya.com',
  phone: '09830765900'
}
{
  _id: 'S005',
  name: 'jadeja',
  DOB: '1940-1-23',
  city: 'kolkata',
  qualification: 'postgraduate',
  email: 'jadeja@yahoo.com',
  phone: '09837865432'
}
```

5. Use query operators to find
i) Students from city kolkata

db.Students.find({city:"kolkata"})

```
‹ {
    _id: 'S001',
    name: 'rajesh',
    DOB: '1980-12-17',
    city: 'kolkata',
    qualification: 'graduate',
    email: 'rajesh@gmail.com',
    phone: '09830978900'
  }
  {
    _id: 'S004',
    name: 'maya',
    DOB: '1990-12-17',
    city: 'kolkata',
    qualification: 'graduate',
    email: 'maya.com',
    phone: '09830765900'
  }
  {
    _id: 'S005',
    name: 'jadeja',
    DOB: '1940-1-23',
    city: 'kolkata',
    qualification: 'postgraduate',
    email: 'jadeja@yahoo.com',
    phone: '09837865432'
  }
```

ii) Postgraduate students

db.Students.find({qualification:"postgraduation"})

```
< {
    _id: 'S002',
    name: 'john',
    DOB: '1949-1-7',
    city: 'hyderabad',
    qualification: 'postgraduate',
    email: 'john@yahoo.com',
    phone: '9833978933'
  }
  {
    _id: 'S003',
    name: 'kunal',
    DOB: '1967-2-3',
    city: 'pune',
    qualification: 'postgraduate',
    email: 'kunal@gmail.com',
    phone: '09830922900'
  }
  {
    _id: 'S005',
    name: 'jadeja',
    DOB: '1940-1-23',
    city: 'kolkata',
    qualification: 'postgraduate',
    email: 'jadeja@yahoo.com',
    phone: '09837865432'
```

iii)Find number of students in each city

```
> db.Student.aggregate([{$group:{
    _id:"$city",
    count:{$sum:1}
  }}])
< {
    _id: 'kolkata',
    count: 3
  }
  {
    _id: 'pune',
    count: 1
  }
  {
    _id: 'hyderabad',
    count: 1
  }
```

iv) Sort students based on name.

```
> db.Student.aggregate([{$sort:{name:1}}])
< {
    _id: 'S005',
    name: 'jadeja',
    DOB: '1940-1-23',
    city: 'kolkata',
    qualification: 'postgraduate',
    email: 'jadeja@yahoo.com',
    phone: '09837865432'
  }
  {
    _id: 'S002',
    name: 'john',
    DOB: '1949-1-7',
    city: 'hyderabad',
    qualification: 'postgraduate',
    email: 'john@yahoo.com',
    phone: '9833978933'
  }
  {
    _id: 'S003',
    name: 'kunal',
    DOB: '1967-2-3',
    city: 'pune',
    qualification: 'postgraduate',
    email: 'kunal@gmail.com',
    phone: '09830922900'
```

```
{
  _id: 'S004',
  name: 'maya',
  DOB: '1990-12-17',
  city: 'kolkata',
  qualification: 'graduate',
  email: 'maya.com',
  phone: '09830765900'
}
{
  _id: 'S001',
  name: 'rajesh',
  DOB: '1980-12-17',
  city: 'kolkata',
  qualification: 'graduate',
  email: 'rajesh@gmail.com',
  phone: '09830978900'
}
```