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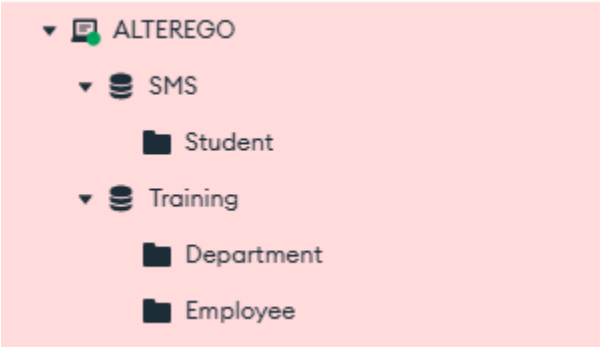
1. Create a database sms in mongodb.



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2. Create collection student with fields
name,dateofbirth,city,qualification,email,phone.
3. Insert one student document.
4. 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'

```
> use SMS
< switched to db SMS
> 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:"9833978933"},
 {_id:"s005",Name:"jadeja",DOB:"1940-1-23",City:"kolkata",Qualification:"postgraduate",email:"jadeja@yahoo.com",phone:"09837865432"}
 ])
< {
   acknowledged: true,
   insertedIds: {
     '0': 's001',
     '1': 's002',
     '2': 's003',
     '3': 's004',
     '4': 's005'
   }
 }
```

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

```
> db.Student.aggregate([
    { $match: { City: { $eq: "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: '9833978933'
  }
```

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ii) Postgraduate students

```
> db.Student.aggregate([
    { $match: { Qualification: { $eq: "postgraduate" } } }
  ])
< {
    _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'
  }
```

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iii)Find number of students in each city

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

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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'
  }
```