Practical No 14

Aim : To Study And Implement Schema And Models, Perform CRUD Operation And Demonstrate Validation And Indexing Techniques in MongoDB Using Mongoose

insertOne

```
> db.student.insertOne({name:"Ashif Shiakh",rollNo:"25SCS32",class:"BSC CS"})
< {
    acknowledged: true,
    insertedId: ObjectId('6943bfb74d79bb471f425bbc')
  }
```

insertMany

```
> db.student.insertMany([
  {name:"Arshad Shaikh",rollNo:"25SCS31",class:"BSC CS"},
  {name:"Farhan Shaikh",rollNo:"25SCS50",class:"BSC CS"},
  {name:"Harsh Salvi",rollNo:"25SCS29",class:"BSC CS"},
  {name:"Sachin Jaiswal",rollNo:"25SCS10",class:"BSC CS"},
  ]
  )
< {
    acknowledged: true,
    insertedIds: {
      '0': ObjectId('6943c3e54d79bb471f425bbd'),
      '1': ObjectId('6943c3e54d79bb471f425bbe'),
      '2': ObjectId('6943c3e54d79bb471f425bbf'),
      '3': ObjectId('6943c3e54d79bb471f425bc0')
    }
  }
```

find

```
> db.student.find()
< {
    _id: ObjectId('6943bfb74d79bb471f425bbc'),
    name: 'Ashif Shaikh',
    rollNo: '25SCS32',
    class: 'BSC CS'
  }
  {
    _id: ObjectId('6943c3e54d79bb471f425bbd'),
    name: 'Arshad Shaikh',
    rollNo: '25SCS31',
    class: 'BSC CS'
  }
```

updateOne

```
> db.student.updateOne({name:"Ashif Shiakh"},{$set:{name:"Ashif Shaikh"}})
< {
    acknowledged: true,
    insertedId: null,
    matchedCount: 1,
    modifiedCount: 1,
    upsertedCount: 0
  }
> db.student.find()
< {
    _id: ObjectId('6943bfb74d79bb471f425bbc'),
    name: 'Ashif Shaikh',
    rollNo: '25SCS32',
    class: 'BSC CS'
  }
```

deleteOne

```
> db.student.deleteOne({rollNo:"25SCS00"})
< {
    acknowledged: true,
    deletedCount: 1
  }
```

Before

```
> db.student.find()
< {
    _id: ObjectId('6943bfb74d79bb471f425bbc'),
    name: 'Ashif Shaikh',
    rollNo: '25SCS32',
    class: 'BSC CS'
  }
  {
    _id: ObjectId('6943c3e54d79bb471f425bbd'),
    name: 'Arshad Shaikh',
    rollNo: '25SCS31',
    class: 'BSC CS'
  }
  {
    _id: ObjectId('6943c3e54d79bb471f425bbe'),
    name: 'Farhan Shaikh',
    rollNo: '25SCS50',
    class: 'BSC CS'
  }
  {
    _id: ObjectId('6943c3e54d79bb471f425bbf'),
    name: 'Harsh Salvi',
    rollNo: '25SCS29',
    class: 'BSC CS'
  }
  {
    _id: ObjectId('6943c3e54d79bb471f425bc0'),
    name: 'Sachin Jaiswal',
    rollNo: '25SCS10',
    class: 'BSC CS'
  }
  {
    _id: ObjectId('6943c5a74d79bb471f425bc1'),
    name: 'I Want To Be Deleted',
    rollNo: '25SCS00',
    class: 'BSC CS'
  }
```

After

```
> db.student.find()
< {
    _id: ObjectId('6943bfb74d79bb471f425bbc'),
    name: 'Ashif Shaikh',
    rollNo: '25SCS32',
    class: 'BSC CS'
  }
  {
    _id: ObjectId('6943c3e54d79bb471f425bbd'),
    name: 'Arshad Shaikh',
    rollNo: '25SCS31',
    class: 'BSC CS'
  }
  {
    _id: ObjectId('6943c3e54d79bb471f425bbe'),
    name: 'Farhan Shaikh',
    rollNo: '25SCS50',
    class: 'BSC CS'
  }
  {
    _id: ObjectId('6943c3e54d79bb471f425bbf'),
    name: 'Harsh Salvi',
    rollNo: '25SCS29',
    class: 'BSC CS'
  }
  {
    _id: ObjectId('6943c3e54d79bb471f425bc0'),
    name: 'Sachin Jaiswal',
    rollNo: '25SCS10',
    class: 'BSC CS'
  }
```