**Non-relational(NoSQL) Database-MongoDB**

**SET-11**

**1.Perform CURD operation**

**//create databse**

employee> use sreyas

switched to db sreyas

**//create collection**

sreyas> db.createCollection('Student');

{ ok: 1 }

**//insertion**

sreyas> db.Student.insert({'Rno':'1','Name':'Piyush','Class':'TE COMP'});

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

{

acknowledged: true,

insertedIds: { '0': ObjectId('661cf3165cfd460a349f990a') }

}

sreyas> db.Student.insert({'Rno':'2','Name':'Abhi','Class':'TE COMP'});

{

acknowledged: true,

insertedIds: { '0': ObjectId('661cf3575cfd460a349f990b') }

}

**//select**

sreyas> db.Student.insert({'Rno':'3','Name':'Ashley','Class':'TE COMP'});

{

acknowledged: true,

insertedIds: { '0': ObjectId('661cf3945cfd460a349f990c') }

}

sreyas> db.Student.insert({'Rno':'4','Name':'Hitesh','Class':'TE COMP'});

{

acknowledged: true,

insertedIds: { '0': ObjectId('661cf3a75cfd460a349f990d') }

}

sreyas> db.Student.insert({'Rno':'5','Name':'Pratik','Class':'TE COMP'});

{

acknowledged: true,

insertedIds: { '0': ObjectId('661cf3ba5cfd460a349f990e') }

}

sreyas> db.Student.insert({'Rno':'6','Name':'Pratik','Class':'TE COMP'});

{

acknowledged: true,

insertedIds: { '0': ObjectId('661cf3c75cfd460a349f990f') }

}

sreyas> db.Student.find()

[

{

\_id: ObjectId('661cf3165cfd460a349f990a'),

Rno: '1',

Name: 'Piyush',

Class: 'TE COMP'

},

{

\_id: ObjectId('661cf3575cfd460a349f990b'),

Rno: '2',

Name: 'Abhi',

Class: 'TE COMP'

},

{

\_id: ObjectId('661cf3945cfd460a349f990c'),

Rno: '3',

Name: 'Ashley',

Class: 'TE COMP'

},

{

\_id: ObjectId('661cf3a75cfd460a349f990d'),

Rno: '4',

Name: 'Hitesh',

Class: 'TE COMP'

},

{

\_id: ObjectId('661cf3ba5cfd460a349f990e'),

Rno: '5',

Name: 'Pratik',

Class: 'TE COMP'

},

{

\_id: ObjectId('661cf3c75cfd460a349f990f'),

Rno: '6',

Name: 'Pratik',

Class: 'TE COMP'

}

]

**//update**

sreyas> db.Student.update({'Name':'Hitesh'},{$set: {'Name':'Henry'}});

DeprecationWarning: Collection.update() is deprecated. Use updateOne, updateMany, or bulkWrite.

{

acknowledged: true,

insertedId: null,

matchedCount: 1,

modifiedCount: 1,

upsertedCount: 0

}

sreyas> db.Student.find().pretty();

[

{

\_id: ObjectId('661cf3165cfd460a349f990a'),

Rno: '1',

Name: 'Piyush',

Class: 'TE COMP'

},

{

\_id: ObjectId('661cf3575cfd460a349f990b'),

Rno: '2',

Name: 'Abhi',

Class: 'TE COMP'

},

{

\_id: ObjectId('661cf3945cfd460a349f990c'),

Rno: '3',

Name: 'Ashley',

Class: 'TE COMP'

},

{

\_id: ObjectId('661cf3a75cfd460a349f990d'),

Rno: '4',

Name: 'Henry',

Class: 'TE COMP'

},

{

\_id: ObjectId('661cf3ba5cfd460a349f990e'),

Rno: '5',

Name: 'Pratik',

Class: 'TE COMP'

},

{

\_id: ObjectId('661cf3c75cfd460a349f990f'),

Rno: '6',

Name: 'Pratik',

Class: 'TE COMP'

}

]

**//remove**

sreyas> db.Student.remove({'ADD':'MP'});

DeprecationWarning: Collection.remove() is deprecated. Use deleteOne, deleteMany, findOneAndDelete, or bulkWrite.

{ acknowledged: true, deletedCount: 0 }

sreyas> db.Student.find().pretty();

[

{

\_id: ObjectId('661cf3165cfd460a349f990a'),

Rno: '1',

Name: 'Piyush',

Class: 'TE COMP'

},

{

\_id: ObjectId('661cf3575cfd460a349f990b'),

Rno: '2',

Name: 'Abhi',

Class: 'TE COMP'

},

{

\_id: ObjectId('661cf3945cfd460a349f990c'),

Rno: '3',

Name: 'Ashley',

Class: 'TE COMP'

},

{

\_id: ObjectId('661cf3a75cfd460a349f990d'),

Rno: '4',

Name: 'Henry',

Class: 'TE COMP'

},

{

\_id: ObjectId('661cf3ba5cfd460a349f990e'),

Rno: '5',

Name: 'Pratik',

Class: 'TE COMP'

},

{

\_id: ObjectId('661cf3c75cfd460a349f990f'),

Rno: '6',

Name: 'Pratik',

Class: 'TE COMP'

}

]

**//save**

sreyas> db.Student.update({'Name':'Piyush'},{$set: {'ADD':'MP'}});

{

acknowledged: true,

insertedId: null,

matchedCount: 1,

modifiedCount: 1,

upsertedCount: 0

}

sreyas> db.Student.find().pretty();

[

{

\_id: ObjectId('661cf3165cfd460a349f990a'),

Rno: '1',

Name: 'Piyush',

Class: 'TE COMP',

ADD: 'MP'

},

{

\_id: ObjectId('661cf3575cfd460a349f990b'),

Rno: '2',

Name: 'Abhi',

Class: 'TE COMP'

},

{

\_id: ObjectId('661cf3945cfd460a349f990c'),

Rno: '3',

Name: 'Ashley',

Class: 'TE COMP'

},

{

\_id: ObjectId('661cf3a75cfd460a349f990d'),

Rno: '4',

Name: 'Henry',

Class: 'TE COMP'

},

{

\_id: ObjectId('661cf3ba5cfd460a349f990e'),

Rno: '5',

Name: 'Pratik',

Class: 'TE COMP'

},

{

\_id: ObjectId('661cf3c75cfd460a349f990f'),

Rno: '6',

Name: 'Pratik',

Class: 'TE COMP'

}

]

**//and**

sreyas> db.Student.find({$and:[{"Name":"Piyush"},{"Rno":"1"}]}).pretty();

[

{

\_id: ObjectId('661cf3165cfd460a349f990a'),

Rno: '1',

Name: 'Piyush',

Class: 'TE COMP',

ADD: 'MP'

}

]

**//or**

sreyas> db.Student.find({$or:[{"Name":"Piyush"},{"Rno":"2"}]}).pretty();

[

{

\_id: ObjectId('661cf3165cfd460a349f990a'),

Rno: '1',

Name: 'Piyush',

Class: 'TE COMP',

ADD: 'MP'

},

{

\_id: ObjectId('661cf3575cfd460a349f990b'),

Rno: '2',

Name: 'Abhi',

Class: 'TE COMP'

}

]

sreyas> db.Student.find({$or:[{"Name":"Piyush"},{"Class":"TE COMP"}]}).pretty();

[

{

\_id: ObjectId('661cf3165cfd460a349f990a'),

Rno: '1',

Name: 'Piyush',

Class: 'TE COMP',

ADD: 'MP'

},

{

\_id: ObjectId('661cf3575cfd460a349f990b'),

Rno: '2',

Name: 'Abhi',

Class: 'TE COMP'

},

{

\_id: ObjectId('661cf3945cfd460a349f990c'),

Rno: '3',

Name: 'Ashley',

Class: 'TE COMP'

},

{

\_id: ObjectId('661cf3a75cfd460a349f990d'),

Rno: '4',

Name: 'Henry',

Class: 'TE COMP'

},

{

\_id: ObjectId('661cf3ba5cfd460a349f990e'),

Rno: '5',

Name: 'Pratik',

Class: 'TE COMP'

},

{

\_id: ObjectId('661cf3c75cfd460a349f990f'),

Rno: '6',

Name: 'Pratik',

Class: 'TE COMP'

}

]

**//nor**

sreyas> db.Student.find({$nor:[{"Name":"Piyush"},{"Class":"TE COMP"}]}).pretty();

sreyas> db.Student.find({$nor:[{"Name":"Piyush"},{"Rno":"2"}]}).pretty();

[

{

\_id: ObjectId('661cf3945cfd460a349f990c'),

Rno: '3',

Name: 'Ashley',

Class: 'TE COMP'

},

{

\_id: ObjectId('661cf3a75cfd460a349f990d'),

Rno: '4',

Name: 'Henry',

Class: 'TE COMP'

},

{

\_id: ObjectId('661cf3ba5cfd460a349f990e'),

Rno: '5',

Name: 'Pratik',

Class: 'TE COMP'

},

{

\_id: ObjectId('661cf3c75cfd460a349f990f'),

Rno: '6',

Name: 'Pratik',

Class: 'TE COMP'

}

]

**//eq**

sreyas> db.Student.find({"Rno":{$eq:"5"}}).pretty();

[

{

\_id: ObjectId('661cf3ba5cfd460a349f990e'),

Rno: '5',

Name: 'Pratik',

Class: 'TE COMP'

}

]

**//ne**

sreyas> db.Student.find({"Rno":{$ne:"5"}}).pretty();

[

{

\_id: ObjectId('661cf3165cfd460a349f990a'),

Rno: '1',

Name: 'Piyush',

Class: 'TE COMP',

ADD: 'MP'

},

{

\_id: ObjectId('661cf3575cfd460a349f990b'),

Rno: '2',

Name: 'Abhi',

Class: 'TE COMP'

},

{

\_id: ObjectId('661cf3945cfd460a349f990c'),

Rno: '3',

Name: 'Ashley',

Class: 'TE COMP'

},

{

\_id: ObjectId('661cf3a75cfd460a349f990d'),

Rno: '4',

Name: 'Henry',

Class: 'TE COMP'

},

{

\_id: ObjectId('661cf3c75cfd460a349f990f'),

Rno: '6',

Name: 'Pratik',

Class: 'TE COMP'

}

]

**//gt**

sreyas> db.Student.find({"Rno":{$ne:"5"}}).pretty();

[

{

\_id: ObjectId('661cf3165cfd460a349f990a'),

Rno: '1',

Name: 'Piyush',

Class: 'TE COMP',

ADD: 'MP'

},

{

\_id: ObjectId('661cf3575cfd460a349f990b'),

Rno: '2',

Name: 'Abhi',

Class: 'TE COMP'

},

{

\_id: ObjectId('661cf3945cfd460a349f990c'),

Rno: '3',

Name: 'Ashley',

Class: 'TE COMP'

},

{

\_id: ObjectId('661cf3a75cfd460a349f990d'),

Rno: '4',

Name: 'Henry',

Class: 'TE COMP'

},

{

\_id: ObjectId('661cf3c75cfd460a349f990f'),

Rno: '6',

Name: 'Pratik',

Class: 'TE COMP'

}

]

sreyas> db.Student.find({"Rno":{$gt:"5"}}).pretty();

[

{

\_id: ObjectId('661cf3c75cfd460a349f990f'),

Rno: '6',

Name: 'Pratik',

Class: 'TE COMP'

}

]

**//gte**

sreyas> db.Student.find({"Rno":{$gte:"5"}}).pretty();

[

{

\_id: ObjectId('661cf3ba5cfd460a349f990e'),

Rno: '5',

Name: 'Pratik',

Class: 'TE COMP'

},

{

\_id: ObjectId('661cf3c75cfd460a349f990f'),

Rno: '6',

Name: 'Pratik',

Class: 'TE COMP'

}

]

**//lt**

sreyas> db.Student.find({"Rno":{$lt:"5"}}).pretty();

[

{

\_id: ObjectId('661cf3165cfd460a349f990a'),

Rno: '1',

Name: 'Piyush',

Class: 'TE COMP',

ADD: 'MP'

},

{

\_id: ObjectId('661cf3575cfd460a349f990b'),

Rno: '2',

Name: 'Abhi',

Class: 'TE COMP'

},

{

\_id: ObjectId('661cf3945cfd460a349f990c'),

Rno: '3',

Name: 'Ashley',

Class: 'TE COMP'

},

{

\_id: ObjectId('661cf3a75cfd460a349f990d'),

Rno: '4',

Name: 'Henry',

Class: 'TE COMP'

}

]

**//lte**

sreyas> db.Student.find({"Rno":{$lte:"5"}}).pretty();

[

{

\_id: ObjectId('661cf3165cfd460a349f990a'),

Rno: '1',

Name: 'Piyush',

Class: 'TE COMP',

ADD: 'MP'

},

{

\_id: ObjectId('661cf3575cfd460a349f990b'),

Rno: '2',

Name: 'Abhi',

Class: 'TE COMP'

},

{

\_id: ObjectId('661cf3945cfd460a349f990c'),

Rno: '3',

Name: 'Ashley',

Class: 'TE COMP'

},

{

\_id: ObjectId('661cf3a75cfd460a349f990d'),

Rno: '4',

Name: 'Henry',

Class: 'TE COMP'

},

{

\_id: ObjectId('661cf3ba5cfd460a349f990e'),

Rno: '5',

Name: 'Pratik',

Class: 'TE COMP'

}

]

sreyas> db.Student.find({"Rno":{$lt:"5",$gt:"2"}}).pretty();

[

{

\_id: ObjectId('661cf3945cfd460a349f990c'),

Rno: '3',

Name: 'Ashley',

Class: 'TE COMP'

},

{

\_id: ObjectId('661cf3a75cfd460a349f990d'),

Rno: '4',

Name: 'Henry',

Class: 'TE COMP'

}

]

sreyas> db.Student.find({"Rno":{$lte:"5",$gte:"2"}}).pretty();

[

{

\_id: ObjectId('661cf3575cfd460a349f990b'),

Rno: '2',

Name: 'Abhi',

Class: 'TE COMP'

},

{

\_id: ObjectId('661cf3945cfd460a349f990c'),

Rno: '3',

Name: 'Ashley',

Class: 'TE COMP'

},

{

\_id: ObjectId('661cf3a75cfd460a349f990d'),

Rno: '4',

Name: 'Henry',

Class: 'TE COMP'

},

{

\_id: ObjectId('661cf3ba5cfd460a349f990e'),

Rno: '5',

Name: 'Pratik',

Class: 'TE COMP'

}

]

sreyas> db.Student.find({"Rno":{$lte:"5",$gt:"2"}}).pretty();

[

{

\_id: ObjectId('661cf3945cfd460a349f990c'),

Rno: '3',

Name: 'Ashley',

Class: 'TE COMP'

},

{

\_id: ObjectId('661cf3a75cfd460a349f990d'),

Rno: '4',

Name: 'Henry',

Class: 'TE COMP'

},

{

\_id: ObjectId('661cf3ba5cfd460a349f990e'),

Rno: '5',

Name: 'Pratik',

Class: 'TE COMP'

}

]

sreyas> db.Student.find({"Rno":{$lt:"5",$gte:"2"}}).pretty();

[

{

\_id: ObjectId('661cf3575cfd460a349f990b'),

Rno: '2',

Name: 'Abhi',

Class: 'TE COMP'

},

{

\_id: ObjectId('661cf3945cfd460a349f990c'),

Rno: '3',

Name: 'Ashley',

Class: 'TE COMP'

},

{

\_id: ObjectId('661cf3a75cfd460a349f990d'),

Rno: '4',

Name: 'Henry',

Class: 'TE COMP'

}

]