

ASSIGNMENT – VII

TITLE :

Study of Open Source NOSQL Database: MongoDB ((Use CRUD operations, SAVE method, logical operators etc.).

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QUERIES :

1)CREATE :

```
use PR7;
switched to db PR7
db.createCollection('Student');
{ ok: 1 }
db.Student.insertMany([
  {ROLL_NO : '301', NAME : 'Varad', CLASS : 'BE (MECH)'},
  {ROLL_NO : '302', NAME : 'Suyash', CLASS : 'SE (IT)'},
  {ROLL_NO : '303', NAME : 'Nikhil', CLASS : 'TE (CIVIL)'},
  {ROLL_NO : '304', NAME : 'Mayur', CLASS : 'SE (AI)'},
  {ROLL_NO : '305', NAME : 'Kedar', CLASS : 'BE (COMP)'},
  {ROLL_NO : '306', NAME : 'Amey', CLASS : 'TE (ENTC)'},
  {ROLL_NO : '307', NAME : 'Vinay', CLASS : 'SE (ELECT)'}
]);
```

2)READ :

```
db.Student.find();
```

```
{
  {
    _id: ObjectId('67ebe986b24e4cca190578b9'),
    ROLL_NO: '301',
    NAME: 'Varad',
    CLASS: 'BE (MECH)'
  }
  {
    _id: ObjectId('67ebe986b24e4cca190578ba'),
    ROLL_NO: '302',
    NAME: 'Suyash',
    CLASS: 'SE (IT)'
  }
  {
    _id: ObjectId('67ebe986b24e4cca190578bb'),
    ROLL_NO: '303',
    NAME: 'Nikhil',
    CLASS: 'TE (CIVIL)'
  }
  {
    _id: ObjectId('67ebe986b24e4cca190578bc'),
    ROLL_NO: '304',
    NAME: 'Mayur',
    CLASS: 'SE (AI)'
  }
}
```

```
{
  {
    _id: ObjectId('67ebe986b24e4cca190578bd'),
    ROLL_NO: '305',
    NAME: 'Kedar',
    CLASS: 'BE (COMP)'
  }
  {
    _id: ObjectId('67ebe986b24e4cca190578be'),
    ROLL_NO: '306',
    NAME: 'Amey',
    CLASS: 'TE (ENTC)'
  }
  {
    _id: ObjectId('67ebe986b24e4cca190578bf'),
    ROLL_NO: '307',
    NAME: 'Vinay',
    CLASS: 'SE (ELECT)'
  }
}
```

```
db.Student.find().pretty()
```

```
< {
    _id: ObjectId('67ebe986b24e4cca190578b9'),
    ROLL_NO: '301',
    NAME: 'Varad',
    CLASS: 'BE (MECH)'
}
{
    _id: ObjectId('67ebe986b24e4cca190578ba'),
    ROLL_NO: '302',
    NAME: 'Suyash',
    CLASS: 'SE (IT)'
}
{
    _id: ObjectId('67ebe986b24e4cca190578bb'),
    ROLL_NO: '303',
    NAME: 'Nikhil',
    CLASS: 'TE (CIVIL)'
}
{
    _id: ObjectId('67ebe986b24e4cca190578bc'),
    ROLL_NO: '304',
    NAME: 'Mayur',
    CLASS: 'SE (AI)'
}

{
    _id: ObjectId('67ebe986b24e4cca190578bd'),
    ROLL_NO: '305',
    NAME: 'Kedar',
    CLASS: 'BE (COMP)'
}
{
    _id: ObjectId('67ebe986b24e4cca190578be'),
    ROLL_NO: '306',
    NAME: 'Amey',
    CLASS: 'TE (ENTC)'
}
{
    _id: ObjectId('67ebe986b24e4cca190578bf'),
    ROLL_NO: '307',
    NAME: 'Vinay',
    CLASS: 'SE (ELECT)'
}
```

3)UPDATE :

```
db.Student.updateOne({NAME : 'Varad'}, {$set: {NAME : 'Satyam'}});
db.Student.find();
```

```
< {
    _id: ObjectId('67ebe986b24e4cca190578b9'),
    ROLL_NO: '301',
    NAME: 'Satyam',
    CLASS: 'BE (MECH)'
}
{
    _id: ObjectId('67ebe986b24e4cca190578ba'),
    ROLL_NO: '302',
    NAME: 'Suyash',
    CLASS: 'SE (IT)'
}
{
    _id: ObjectId('67ebe986b24e4cca190578bb'),
    ROLL_NO: '303',
    NAME: 'Nikhil',
    CLASS: 'TE (CIVIL)'
}
{
    _id: ObjectId('67ebe986b24e4cca190578bc'),
    ROLL_NO: '304',
    NAME: 'Mayur',
    CLASS: 'SE (AI)'
}
```

```
db.Student.updateOne({NAME : 'Suyash'},{$set: {NAME : 'Pratik'}});  
db.Student.find();
```

```
< {  
    _id: ObjectId('67ebe986b24e4cca190578b9'),  
    ROLL_NO: '301',  
    NAME: 'Satyam',  
    CLASS: 'BE (MECH)'  
}  
{  
    _id: ObjectId('67ebe986b24e4cca190578ba'),  
    ROLL_NO: '302',  
    NAME: 'Pratik',  
    CLASS: 'SE (IT)'  
}  
{  
    _id: ObjectId('67ebe986b24e4cca190578bb'),  
    ROLL_NO: '303',  
    NAME: 'Nikhil',  
    CLASS: 'TE (CIVIL)'  
}  
{  
    _id: ObjectId('67ebe986b24e4cca190578bc'),  
    ROLL_NO: '304',  
    NAME: 'Mayur',  
    CLASS: 'SE (AI)'  
}
```

4)DELETE :

```
db.Student.remove({ROLL_NO : '304'});  
db.Student.find();
```

```
< {  
    _id: ObjectId('67ebe986b24e4cca190578b9'),  
    ROLL_NO: '301',  
    NAME: 'Satyam',  
    CLASS: 'BE (MECH)'  
}  
{  
    _id: ObjectId('67ebe986b24e4cca190578ba'),  
    ROLL_NO: '302',  
    NAME: 'Pratik',  
    CLASS: 'SE (IT)'  
}  
{  
    _id: ObjectId('67ebe986b24e4cca190578bb'),  
    ROLL_NO: '303',  
    NAME: 'Nikhil',  
    CLASS: 'TE (CIVIL)'  
}  
  
{  
    _id: ObjectId('67ebe986b24e4cca190578bd'),  
    ROLL_NO: '305',  
    NAME: 'Kedar',  
    CLASS: 'BE (COMP)'  
}  
{  
    _id: ObjectId('67ebe986b24e4cca190578be'),  
    ROLL_NO: '306',  
    NAME: 'Amey',  
    CLASS: 'TE (ENTC)'  
}  
{  
    _id: ObjectId('67ebe986b24e4cca190578bf'),  
    ROLL_NO: '307',  
    NAME: 'Vinay',  
    CLASS: 'SE (ELECT)'  
}
```

5)Logical Operators :

```
> db.Student.find({$and : [{NAME: 'Pratik'}, {ROLL_NO: '302'}]});  
< {  
    _id: ObjectId('67ebe986b24e4cca190578ba'),  
    ROLL_NO: '302',  
    NAME: 'Pratik',  
    CLASS: 'SE (IT)'  
}  
  
> db.Student.find({$or : [{NAME: 'Vinay'}, {ROLL_NO: '303'}]});  
< {  
    _id: ObjectId('67ebe986b24e4cca190578bb'),  
    ROLL_NO: '303',  
    NAME: 'Nikhil',  
    CLASS: 'TE (CIVIL)'  
}  
  
{  
    _id: ObjectId('67ebe986b24e4cca190578bf'),  
    ROLL_NO: '307',  
    NAME: 'Vinay',  
    CLASS: 'SE (ELECT)'  
}  
  
> db.Student.find({$or : [{NAME: 'Amey'}, {CLASS: 'TE (CIVIL)'}]}).pretty();  
< {  
    _id: ObjectId('67ebe986b24e4cca190578bb'),  
    ROLL_NO: '303',  
    NAME: 'Nikhil',  
    CLASS: 'TE (CIVIL)'  
}  
  
{  
    _id: ObjectId('67ebe986b24e4cca190578be'),  
    ROLL_NO: '306',  
    NAME: 'Amey',  
    CLASS: 'TE (ENTC)'  
}  
  
> db.Student.find({$nor:[{NAME: 'Amey'}, {ROLL_NO: '307'}]}).pretty();  
< {  
    _id: ObjectId('67ebe986b24e4cca190578b9'),  
    ROLL_NO: '301',  
    NAME: 'Satyam',  
    CLASS: 'BE (MECH)'  
}  
  
{  
    _id: ObjectId('67ebe986b24e4cca190578ba'),  
    ROLL_NO: '302',  
    NAME: 'Pratik',  
    CLASS: 'SE (IT)'  
}  
  
{  
    _id: ObjectId('67ebe986b24e4cca190578bb'),  
    ROLL_NO: '303',  
    NAME: 'Nikhil',  
    CLASS: 'TE (CIVIL)'  
}  
  
{  
    _id: ObjectId('67ebe986b24e4cca190578bd'),  
    ROLL_NO: '305',  
    NAME: 'Kedar',  
    CLASS: 'BE (COMP)'  
}
```