

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)'
}
```