

# BDA LAB-1

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1BM21CS202

1. Create a database "Student" with the following attributes , RollNo, Age, ContactNo, Email-Id.

```
mongosh mongodb+srv://<u>c</u> x + v
Microsoft Windows [Version 10.0.22631.3296]
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C:\Users\STUDENT>mongosh "mongodb+srv://cluster0.lwosis3.mongodb.net/" --apiVersion 1 --username skanda --password skanda
Current Mongosh Log ID: 660a77b2e984f9d7dd18d38e
Connecting to:      mongodb+srv://<u>credentials</u>@cluster0.lwosis3.mongodb.net/?appName=mongosh+2.0.0
Using MongoDB:      7.0.7 (API Version 1)
Using Mongosh:      2.0.0
mongosh 2.2.1 is available for download: https://www.mongodb.com/try/download/shell

For mongosh info see: https://docs.mongodb.com/mongodb-shell/

Atlas atlas-f4tdyn-shard-0 [primary] test> db.createCollection("Student");
{ ok: 1 }
Atlas atlas-f4tdyn-shard-0 [primary] test> db.student.insert({RollNo:1, Age:21, Cont:9876, email:"db.Student.insert({RollNo
:1, Age:21, Cont:9876, email:"antara.de9@gmail.com"}});
Uncaught:
SyntaxError: Unexpected token, expected ",", (1:104)

> 1 | db.student.insert({RollNo:1, Age:21, Cont:9876, email:"db.Student.insert({RollNo:1, Age:21, Cont:9876, email:"antara.de9
@gmail.com"}});
    |
    2 |

Atlas atlas-f4tdyn-shard-0 [primary] test> db.Student.insert({RollNo:1, Age:21, Cont:9876, email:"antara.de9@gmail.com"});
DeprecationWarning: Collection.insert() is deprecated. Use insertOne, insertMany, or bulkWrite.
{
  acknowledged: true,
  insertedIds: { '0': ObjectId("660a7a96e984f9d7dd18d38f") }
```

```
Atlas atlas-f4tdyn-shard-0 [primary] test> db.Student.insert({RollNo:1, Age:21, Cont:9876, email:"antara.de9@gmail.com"});
DeprecationWarning: Collection.insert() is deprecated. Use insertOne, insertMany, or bulkWrite.
{
  acknowledged: true,
  insertedIds: { '0': ObjectId("660a7a96e984f9d7dd18d38f") }
}
Atlas atlas-f4tdyn-shard-0 [primary] test> db.Student.insert({RollNo:2, Age:22, Cont:9976, email:"anushka.de9@gmail.com"});
{
  acknowledged: true,
  insertedIds: { '0': ObjectId("660a7a9ce984f9d7dd18d390") }
}
Atlas atlas-f4tdyn-shard-0 [primary] test> db.Student.insert({RollNo:3, Age:21, Cont:5576, email:"anubhav.de9@gmail.com"});
{
  acknowledged: true,
  insertedIds: { '0': ObjectId("660a7aa1e984f9d7dd18d391") }
}
Atlas atlas-f4tdyn-shard-0 [primary] test> db.Student.insert({RollNo:4, Age:20, Cont:4476, email:"pani.de9@gmail.com"});
{
  acknowledged: true,
  insertedIds: { '0': ObjectId("660a7aa5e984f9d7dd18d392") }
}
Atlas atlas-f4tdyn-shard-0 [primary] test> db.Student.insert({RollNo:10, Age:23, Cont:2276, email:"rekha.de9@gmail.com"});
{
  acknowledged: true,
  insertedIds: { '0': ObjectId("660a7aabe984f9d7dd18d393") }
}
Atlas atlas-f4tdyn-shard-0 [primary] test> db.Student.find()
```

```
mongosh mongodb+srv://<u>c</u> X + v
[
  {
    _id: ObjectId("660a7a96e984f9d7dd18d38f"),
    RollNo: 1,
    Age: 21,
    Cont: 9876,
    email: 'antara.de9@gmail.com'
  },
  {
    _id: ObjectId("660a7a9ce984f9d7dd18d390"),
    RollNo: 2,
    Age: 22,
    Cont: 9976,
    email: 'anushka.de9@gmail.com'
  },
  {
    _id: ObjectId("660a7aa1e984f9d7dd18d391"),
    RollNo: 3,
    Age: 21,
    Cont: 5576,
    email: 'anubhav.de9@gmail.com'
  },
  {
    _id: ObjectId("660a7aa5e984f9d7dd18d392"),
    RollNo: 4,
    Age: 20,
    Cont: 4476,
    email: 'pani.de9@gmail.com'
  },
  {

```

```
mongosh mongodb+srv://<u>c</u> X + v
email: 'pani.de9@gmail.com'
},
{
  _id: ObjectId("660a7aabe984f9d7dd18d393"),
  RollNo: 10,
  Age: 23,
  Cont: 2276,
  email: 'rekha.de9@gmail.com'
}
]
Atlas atlas-f4tdyn-shard-0 [primary] test> db.Student.update({RollNo:10},{set:{
... email:"Abhinav@gmail.com"}})
DeprecationWarning: Collection.update() is deprecated. Use updateOne, updateMany, or bulkWrite.
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 1,
  upsertedCount: 0
}
Atlas atlas-f4tdyn-shard-0 [primary] test> db.Student.insert({RollNo:11, Age:22, Name:
... "ABC", Cont:2276, email:"rea.de9@gmail.com"});
{
  acknowledged: true,
  insertedIds: { '0': ObjectId("660a7acde984f9d7dd18d394") }
}
Atlas atlas-f4tdyn-shard-0 [primary] test> db.Student.update({RollNo:11, Name:"ABC"},{$se
... t:{Name:"FEM"}})
Uncaught:
SyntaxError: Unexpected token, expected ",", (2:0)
```

```

Atlas atlas-f4tdyn-shard-0 [primary] test> db.Student.update({RollNo:11,Name:"ABC"},{$set:{Name:"FEM"}})
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 1,
  upsertedCount: 0
}
Atlas atlas-f4tdyn-shard-0 [primary] test> db.Student.find()
[
  {
    _id: ObjectId("660a7a96e984f9d7dd18d38f"),
    RollNo: 1,
    Age: 21,
    Cont: 9876,
    email: 'antara.de9@gmail.com'
  },
  {
    _id: ObjectId("660a7a9ce984f9d7dd18d390"),
    RollNo: 2,
    Age: 22,
    Cont: 9976,
    email: 'anushka.de9@gmail.com'
  },
  {
    _id: ObjectId("660a7aa1e984f9d7dd18d391"),
    RollNo: 3,
    Age: 21,
    Cont: 5576,
    email: 'anubhav.de9@gmail.com'
  }
]

```

```

mongosh mongodb+srv://<ci> X + v
Age: 21,
Cont: 5576,
email: 'anubhav.de9@gmail.com'
},
{
  _id: ObjectId("660a7aa5e984f9d7dd18d392"),
  RollNo: 4,
  Age: 20,
  Cont: 4476,
  email: 'pani.de9@gmail.com'
},
{
  _id: ObjectId("660a7aabe984f9d7dd18d393"),
  RollNo: 10,
  Age: 23,
  Cont: 2276,
  email: 'Abhinav@gmail.com'
},
{
  _id: ObjectId("660a7acde984f9d7dd18d394"),
  RollNo: 11,
  Age: 22,
  Name: 'FEM',
  Cont: 2276,
  email: 'rea.de9@gmail.com'
}
]
Atlas atlas-f4tdyn-shard-0 [primary] test> db.Student.update({RollNo:10},{$set:{
... email:"Abhinav@gmail.com"}})
{

```

```

Atlas atlas-f4tdyn-shard-0 [primary] test> db.Student.update({RollNo:10},{ $set:{
... email:"Abhinav@gmail.com"}})
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 0,
  upsertedCount: 0
}
Atlas atlas-f4tdyn-shard-0 [primary] test> db.Student.update({RollNo:11,Name:"ABC"},{$se
... t:{Name:"FEM"}})
Uncaught:
SyntaxError: Unexpected token, expected ",", (2:0)

   1 | db.Student.update({RollNo:11,Name:"ABC"},{$se
>  2 | t:{Name:"FEM"}})
     | ^
     |
   3 |

Atlas atlas-f4tdyn-shard-0 [primary] test> db.Student.update({RollNo:11,Name:"ABC"},{$set:{Name:"FEM"}})
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
Atlas atlas-f4tdyn-shard-0 [primary] test> use myDB;
switched to db myDB
Atlas atlas-f4tdyn-shard-0 [primary] myDB> db;

```

Perform the following in Mongoshell

1. Execute the mongodb queries given in MongoDB\_BDA\_Final document.
2. Execute MongoDB exercises (Write it in observation)

```

Atlas atlas-f4tdyn-shard-0 [primary] test> use myDB;
switched to db myDB
Atlas atlas-f4tdyn-shard-0 [primary] myDB> db;
myDB
Atlas atlas-f4tdyn-shard-0 [primary] myDB> show dbs;
sample_mflix 116.12 MiB
test          72.00 KiB
admin         336.00 KiB
local         4.99 GiB
Atlas atlas-f4tdyn-shard-0 [primary] myDB> db.createCollection("Student");
Uncaught:
SyntaxError: Unexpected character '"'. (1:20)

> 1 | db.createCollection("Student");
   | ^
   |
   2 |

Atlas atlas-f4tdyn-shard-0 [primary] myDB> db.createCollection('Student');
{ ok: 1 }
Atlas atlas-f4tdyn-shard-0 [primary] myDB> db.Student.drop();
true
Atlas atlas-f4tdyn-shard-0 [primary] myDB> db.Student.insert({_id:1,StudName:"MichelleJacintha",Grade:"V
I",Hobbies:"InternetS
Uncaught:
SyntaxError: Unexpected token (1:34)

> 1 | db.Student.insert({_id:1,StudName:"MichelleJacintha",Grade:"VI",Hobbies:"InternetS
   | ^
   |
   2 |

```

```

Atlas atlas-f4tdyn-shard-0 [primary] myDB> db.Student.insert({_id:1,StudName:"MichelleJacintha",Grade:"VII",Hobbies:"InternetSurfing"});
{ acknowledged: true, insertedIds: { '0': 1 } }
Atlas atlas-f4tdyn-shard-0 [primary] myDB> db.Student.update({_id:3,StudName:"AryanDavid",Grade:"VII"},{$set:{Hobbies:"Skatin"});
Uncaught:
SyntaxError: Unexpected token (1:34)

> 1 | db.Student.update({_id:3,StudName:"AryanDavid",Grade:"VII"},{$set:{Hobbies:"Skatin
    |                                     ^
    2 |

Atlas atlas-f4tdyn-shard-0 [primary] myDB> db.Student.update({_id:3,StudName:"AryanDavid",Grade:"VII"},{$set:{Hobbies:"Skating"}},{upsert:true});
{
  acknowledged: true,
  insertedId: 3,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 1
}
Atlas atlas-f4tdyn-shard-0 [primary] myDB> db.Student.find({StudName:"Aryan David"});

Atlas atlas-f4tdyn-shard-0 [primary] myDB> db.Student.find({}, {StudName:1,Grade:1,_id:0});
[
  { StudName: 'MichelleJacintha', Grade: 'VII' },
  { Grade: 'VII', StudName: 'AryanDavid' }
]
Atlas atlas-f4tdyn-shard-0 [primary] myDB> db.Student.find({Grade:{$eq:"VII"}}).pretty();
Uncaught:

```

```

> 1 | db.Student.find({Hobbies :{ $in: ['Chess','Skating']}}).pretty ();
    |                                     ^
    2 |

Atlas atlas-f4tdyn-shard-0 [primary] myDB> db.Student.find({Hobbies :{ $in: ['Chess','Skating']}}).pretty ();
[
  { _id: 3, Grade: 'VII', StudName: 'AryanDavid', Hobbies: 'Skating' }
]
Atlas atlas-f4tdyn-shard-0 [primary] myDB> db.Student.find({StudName:/^M/}).pretty();
[
  {
    _id: 1,
    StudName: 'MichelleJacintha',
    Grade: 'VII',
    Hobbies: 'InternetSurfing'
  }
]
Atlas atlas-f4tdyn-shard-0 [primary] myDB> db.Student.find({StudName:/e/}).pretty();
[
  {
    _id: 1,
    StudName: 'MichelleJacintha',
    Grade: 'VII',
    Hobbies: 'InternetSurfing'
  }
]
Atlas atlas-f4tdyn-shard-0 [primary] myDB> db.Student.count();
DeprecationWarning: Collection.count() is deprecated. Use countDocuments or estimatedDocumentCount.
2

```