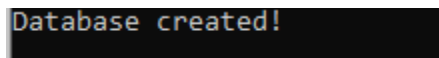# Task 1:

```
var MongoClient = require('mongodb').MongoClient;
var url = "mongodb://localhost:27017/mydb";

MongoClient.connect(url, function(err, db) {
  if (err) throw err;
  console.log("Database created!");
  db.close();
});
```
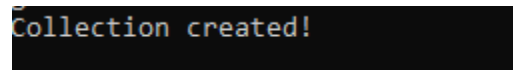
```
Database created!
```

Task2:

```
var MongoClient = require('mongodb').MongoClient;

var url = "mongodb://localhost:27017/";

MongoClient.connect(url, function(err, db) {

  if (err) throw err;

  var dbo = db.db("mydb");

  dbo.createCollection("customers", function(err, res) {

    if (err) throw err;

    console.log("Collection created!");

    db.close();

  });

});
```
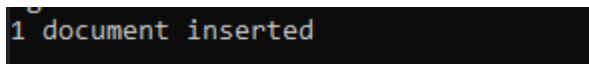
```
Collection created!
```

Task3:

```
    var MongoClient = require('mongodb').MongoClient;
    var url = "mongodb://localhost:27017/";

    MongoClient.connect(url, function(err, db) {
      if (err) throw err;
      var dbo = db.db("mydb");
      var myobj = { name: "ALi ", address: "Khanewal" };
      dbo.collection("customers").insertOne(myobj, function(err, res) {
        if (err) throw err;
        console.log("1 document inserted");
        db.close();
      });
    });
```

```
1 document inserted
```

Task 4:

```
var MongoClient = require('mongodb').MongoClient;

var url = "mongodb://localhost:27017/";

MongoClient.connect(url, function(err, db) {

 if (err) throw err;

 var dbo = db.db("mydb");

 var myobj = [

  { name: 'John', address: 'Highway 71'},

  { name: 'Peter', address: 'Lowstreet 4'},

  { name: 'Amy', address: 'Apple st 652'},

  { name: 'Hannah', address: 'Mountain 21'},

  { name: 'Michael', address: 'Valley 345'},
```

```
    { name: 'Sandy', address: 'Ocean blvd 2'},

    { name: 'Betty', address: 'Green Grass 1'},

    { name: 'Richard', address: 'Sky st 331'},

    { name: 'Susan', address: 'One way 98'},

    { name: 'Vicky', address: 'Yellow Garden 2'},

    { name: 'Ben', address: 'Park Lane 38'},

    { name: 'William', address: 'Central st 954'},

    { name: 'Chuck', address: 'Main Road 989'},

    { name: 'Viola', address: 'Sideway 1633'}

  ];

  dbo.collection("customers").insertMany(myobj, function(err, res) {

    if (err) throw err;

    console.log("Number of documents inserted: " + res.insertedCount);

    db.close();

  });

});
```

```
Number of documents inserted: 14
```

Task 5:

```
    var MongoClient = require('mongodb').MongoClient;
    var url = "mongodb://localhost:27017/";

    MongoClient.connect(url, function(err, db) {
      if (err) throw err;
      var dbo = db.db("mydb");
      var myobj = [
        { _id: 180, name: 'Chocolate Heaven'},
        { _id: 181, name: 'Tasty Lemon'},
        { _id: 182, name: 'Vanilla Dream'}
      ];
```

```
        dbo.collection("products").insertMany(myobj, function(err, res) {
          if (err) throw err;
          console.log(res);
          db.close();
        });
});
```

```
{
  result: { ok: 1, n: 3 },
  ops: [
    { _id: 180, name: 'Chocolate Heaven' },
    { _id: 181, name: 'Tasty Lemon' },
    { _id: 182, name: 'Vanilla Dream' }
  ],
  insertedCount: 3,
  insertedIds: { '0': 180, '1': 181, '2': 182 }
}
```

Task 6:

```
        var MongoClient = require('mongodb').MongoClient;
        var url = "mongodb://localhost:27017/";

        MongoClient.connect(url, function(err, db) {
          if (err) throw err;
          var dbo = db.db("mydb");
          dbo.collection("customers").findOne({}, function(err, result) {
            if (err) throw err;
            console.log(result.name);
            db.close();
          });
});
```

```
John
```

Task 7:

```
var MongoClient = require('mongodb').MongoClient;

var url = "mongodb://localhost:27017/";


MongoClient.connect(url, function(err, db) {
```

```
  if (err) throw err;

  var dbo = db.db("mydb");

  dbo.collection("customers").find({}).toArray(function(err, result) {

    if (err) throw err;

    console.log(result);

    db.close();

  });

});
```
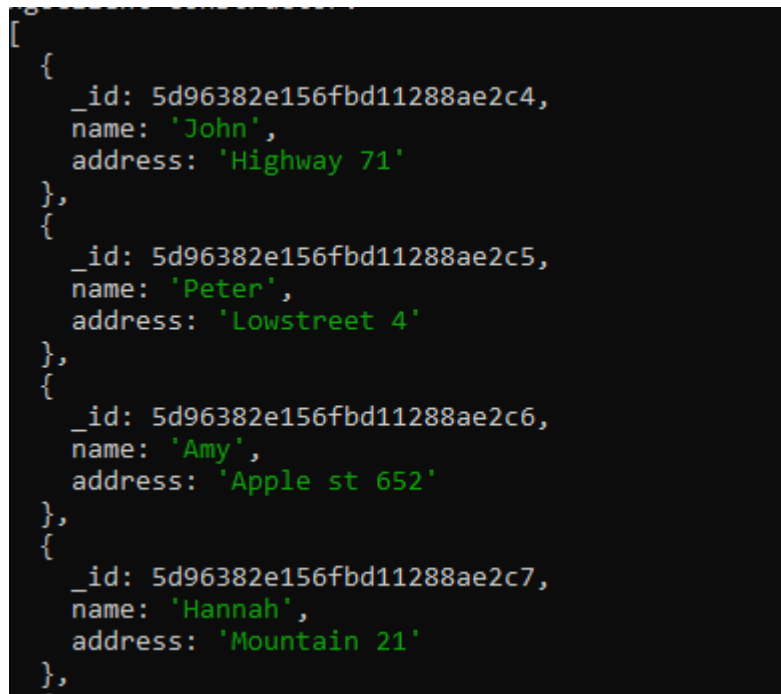

Task 8:

```
var MongoClient = require('mongodb').MongoClient;

var url = "mongodb://localhost:27017/";

MongoClient.connect(url, function(err, db) {

  if (err) throw err;

  var dbo = db.db("mydb");
```

```
var query = { address: "Park Lane 38" };

dbo.collection("customers").find(query).toArray(function(err, result) {

  if (err) throw err;

  console.log(result);

  db.close();

 });

});
```
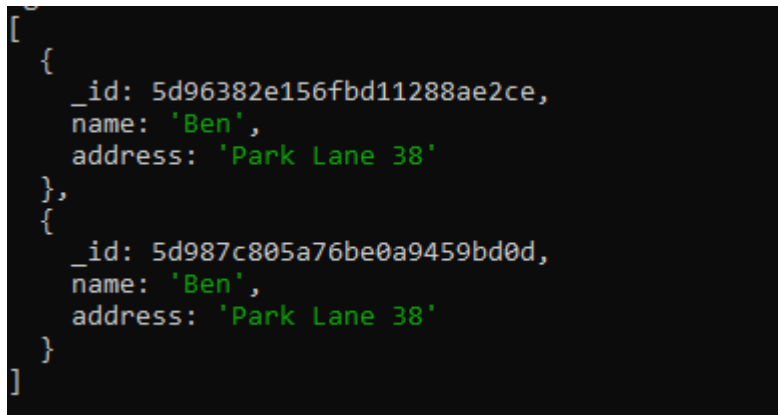
```
[
  {
    _id: 5d96382e156fbd11288ae2ce,
    name: 'Ben',
    address: 'Park Lane 38'
  },
  {
    _id: 5d987c805a76be0a9459bd0d,
    name: 'Ben',
    address: 'Park Lane 38'
  }
]
```

Task 9:

```
var MongoClient = require('mongodb').MongoClient;

var url = "mongodb://localhost:27017/";


MongoClient.connect(url, function(err, db) {

 if (err) throw err;

 var dbo = db.db("mydb");

 var mysort = { name: 1 };

 dbo.collection("customers").find().sort(mysort).toArray(function(err, result) {

  if (err) throw err;
```

```
    console.log(result);

    db.close();

  });

});
```

```
{ _id: 5d96382e156fbd11288ae2d1, name: 'ALi', address: 'lahore' },
{ _id: 5d987be05f09c528c4df4430, name: 'ALi ', address: 'Khanewal' },
{
  _id: 5d96382e156fbd11288ae2c6,
  name: 'Amy',
  address: 'Apple st 652'
},
{
  _id: 5d987c805a76be0a9459bd05,
  name: 'Amy',
  address: 'Apple st 652'
},
{
  _id: 5d96382e156fbd11288ae2ce,
  name: 'Ben',
  address: 'Park Lane 38'
```

Task 10:

```
var MongoClient = require('mongodb').MongoClient;

var url = "mongodb://localhost:27017/";


MongoClient.connect(url, function(err, db) {

  if (err) throw err;

  var dbo = db.db("mydb");

  var myquery = { address: 'Mountain 21' };

  dbo.collection("customers").deleteOne(myquery, function(err, obj) {

    if (err) throw err;

    console.log("1 document deleted");

    db.close();

  });
```

```
});
```

`1 document deleted`

Task 11:

```
var MongoClient = require('mongodb').MongoClient;

var url = "mongodb://localhost:27017/";


MongoClient.connect(url, function(err, db) {

  if (err) throw err;

  var dbo = db.db("mydb");

  var myquery = { address: /^O/ };

  dbo.collection("customers").deleteMany(myquery, function(err, obj) {

    if (err) throw err;

    console.log(obj.result.n + " document(s) deleted");

    db.close();

  });

});
```

`4 document(s) deleted`

Task 12:

```
var MongoClient = require('mongodb').MongoClient;

var url = "mongodb://localhost:27017/";


MongoClient.connect(url, function(err, db) {

  if (err) throw err;

  var dbo = db.db("mydb");
```

```
dbo.collection("customers").drop(function(err, delOK) {

  if (err) throw err;

  if (delOK) console.log("Collection deleted");

  db.close();

 });

});
```

```
Collection deleted
```

Task 13:

```
var MongoClient = require('mongodb').MongoClient;

var url = "mongodb://127.0.0.1:27017/";


MongoClient.connect(url, function(err, db) {

 if (err) throw err;

 var dbo = db.db("mydb");

 var myquery = { address: "Valley 345" };

 var newvalues = { $set: {name: "Mickey", address: "Canyon 123" } };

 dbo.collection("customers").updateOne(myquery, newvalues, function(err, res) {

  if (err) throw err;

  console.log("1 document updated");

  db.close();

 });

});
```

```
1 document updated
```

Task 14:

```
var MongoClient = require('mongodb').MongoClient;

var url = "mongodb://localhost:27017/";


MongoClient.connect(url, function(err, db) {
  if (err) throw err;
  var dbo = db.db("mydb");
  dbo.collection("customers").find().limit(5).toArray(function(err, result) {
    if (err) throw err;
    console.log(result);
    db.close();
  });
});
```

```
[
  {
    _id: 5d96382e156fbd11288ae2c4,
    name: 'John',
    address: 'Highway 71'
  },
  {
    _id: 5d96382e156fbd11288ae2c5,
    name: 'Peter',
    address: 'Lowstreet 4'
  },
  {
    _id: 5d96382e156fbd11288ae2c6,
    name: 'Amy',
    address: 'Apple st 652'
  },
  {
    _id: 5d96382e156fbd11288ae2c8,
    name: 'Mickey',
    address: 'Canyon 123'
  },
  {
    _id: 5d96382e156fbd11288ae2ca,
    name: 'Betty',
    address: 'Green Grass 1'
  }
]
```

Task 15:

```
var MongoClient = require('mongodb').MongoClient;

var url = "mongodb://127.0.0.1:27017/";


MongoClient.connect(url, function(err, db) {

  if (err) throw err;

  var dbo = db.db("mydb");

  dbo.collection('customer').aggregate([

    { $lookup:

      {

        from: 'products',
```

```
      localField: 'product_id',

      foreignField: '_id',

      as: 'orderdetails'

    }

  }

]).toArray(function(err, res) {

if (err) throw err;

console.log(JSON.stringify(res));

db.close();

});

});
```