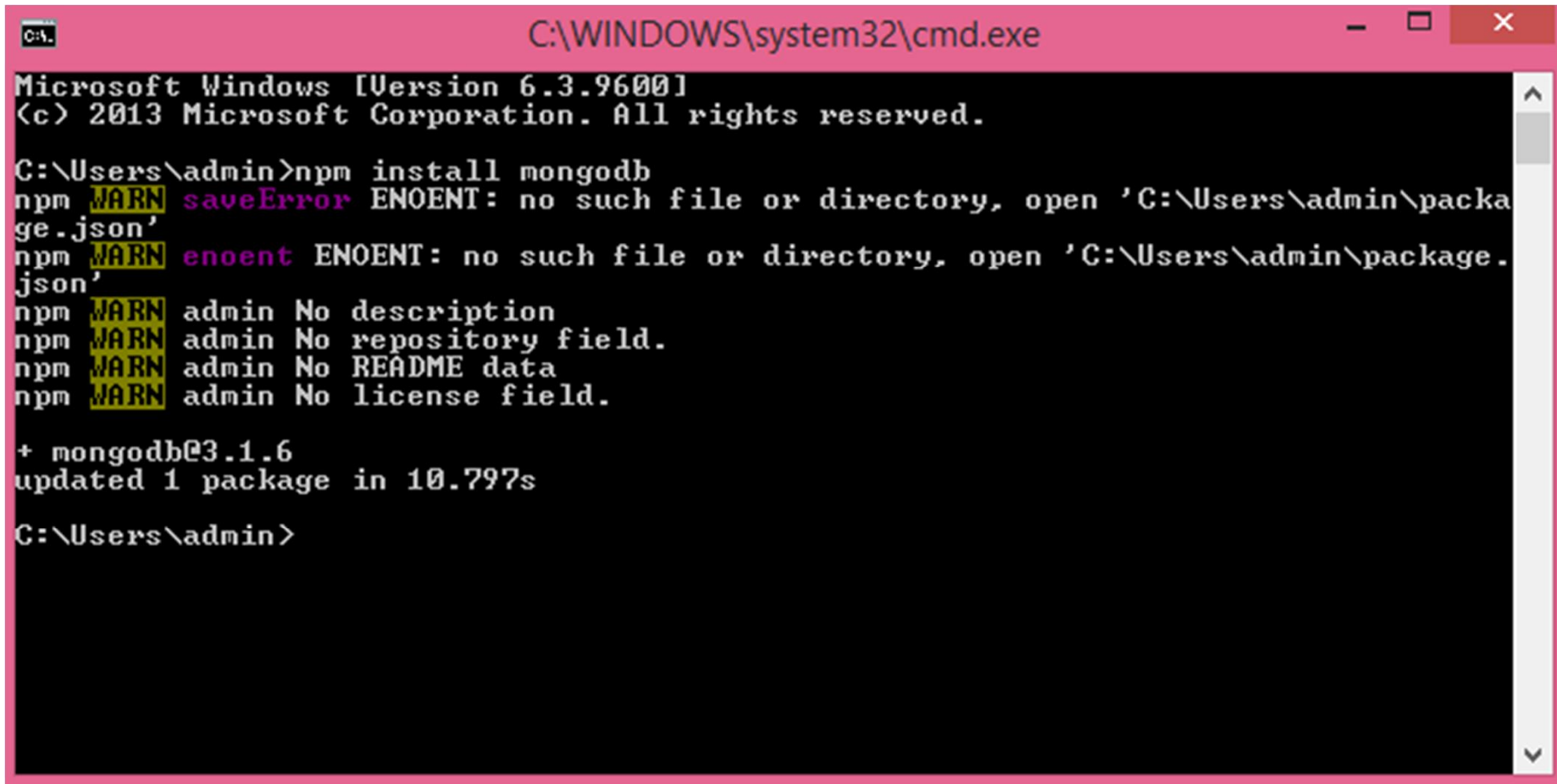# Client-Server-Database

MONGODB
Manipulation Using
NODE JS

- **Install MongoDB Driver** to connect node js and mongodb
- Type command → C:\Users\admin>npm install mongodb

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Create MongoDB database through Node JS
C:\Users\admin\ node_mongodb.js

```
var MongoClient=require('mongodb').MongoClient;
console.log(MongoClient);
var url="mongodb://localhost:27017/";
MongoClient.connect(url,function(err,db) {
  if (err)        throw err;
var db1 =db.db("mydb");
  console.log("Database connected!");
  db.close();});
```

➢ 27017 is the default port number for MongoDB.

➢ MongoDB waits until you have created a collection (table), with at least one document (record) before it actually creates the database (and collection).
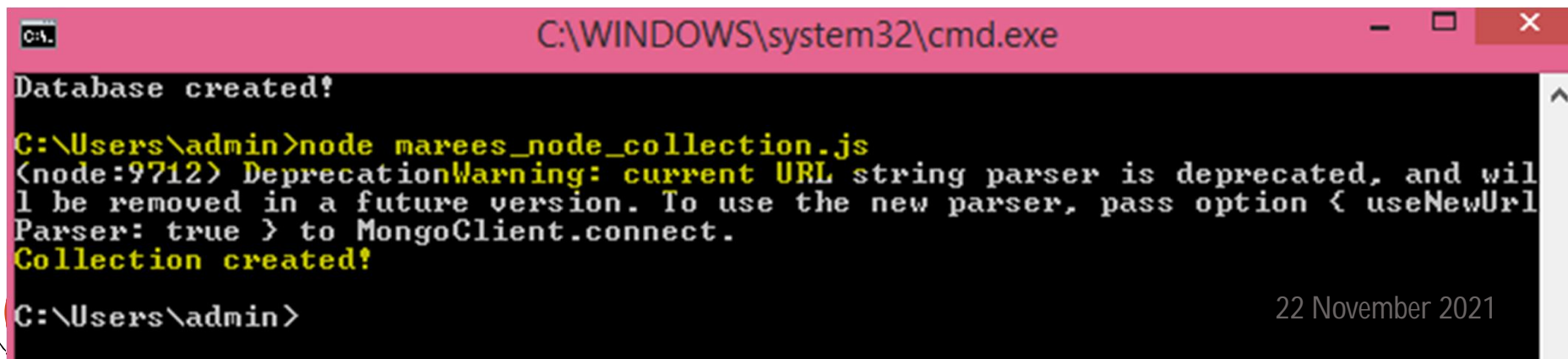
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Run the connectivity program by C:\Users\admin>node node_mongodb.js

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C:\Users\admin\node_collection.js

```javascript
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();   }); });
```

```
C:\WINDOWS\system32\cmd.exe                                    ─  □  ×

Database created!

C:\Users\admin>node marees_node_collection.js
<node:9712> DeprecationWarning: current URL string parser is deprecated, and wil
l be removed in a future version. To use the new parser, pass option < useNewUrl
Parser: true > to MongoClient.connect.
Collection created!

C:\Users\admin>
```

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C:\Users\admin\node_insert.js

```javascript
var MongoClient = require('mongodb').MongoClient;
var url = "mongodb://localhost:27017/mydb";
MongoClient.connect(url, function(err, db) {
  if (err) throw err;
  var dbo = db.db("mydb");
  var myobj = { CompanyID:"1",name: "Vijayan Infotech", address:
"VIT Road,Vellore" };
  dbo.collection("customers").insertOne(myobj, function(err, res) {
    if (err) throw err;
    console.log("1 document inserted");
    db.close();  });});
```

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insertMany for array of documents to insert

```
C:\Users\admin>node marees_node_mongodb_insert.js
(node:8056) DeprecationWarning: current URL string parser is deprecated, and wil
l be removed in a future version. To use the new parser, pass option { useNewUrl
Parser: true } to MongoClient.connect.
1 document inserted

C:\Users\admin>node marees_node_mongodb_insert.js
(node:6616) DeprecationWarning: current URL string parser is deprecated, and wil
l be removed in a future version. To use the new parser, pass option { useNewUrl
Parser: true } to MongoClient.connect.
1 document inserted
```

- Run the node program like above
- Run the below commands in mongo client

```
> use mydb
switched to db mydb
> show collections;
customers
> db.customers.find().pretty();
{
        "_id" : ObjectId("5bd03b0cceec371f78bede66"),
        "name" : "Company Inc",
        "address" : "Highway 37"
}
> db.customers.find().pretty();
{
        "_id" : ObjectId("5bd03b0cceec371f78bede66"),
        "name" : "Company Inc",
        "address" : "Highway 37"
}
{
        "_id" : ObjectId("5bd03c00f68d6d19d854898a"),
        "CompanyID" : "1",
        "name" : "Marees Infotech",
        "address" : "VIT Road, Vellore"
}
>
>
```

C:\Users\admin\node_find.js

```
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 = { name: "Marees Infotech" };
  dbo.collection("customers").find(query).toArray(function(err,
result) {
    if (err) throw err;
    console.log(result);
    db.close();  });});
```

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```
> db.customers.find().pretty();
{
        "_id" : ObjectId("5bd03b0cceec371f78bede66"),
        "name" : "Company Inc",
        "address" : "Highway 37"
}
{

        "_id" : ObjectId("5bd03c00f68d6d19d854898a"),
        "CompanyID" : "1",
        "name" : "Marees Infotech",
        "address" : "VIT Road, Vellore"
}
{

        "_id" : ObjectId("5bd045a02359901b806cbfba"),
        "CompanyID" : "1",
        "name" : "Marees Infotech",
        "address" : "VIT Road, Vellore"
}
```

```
C:\Users\admin>node marees_node_mongodb_find.js
(node:11260) DeprecationWarning: current URL string parser is deprecated, and wi
ll be removed in a future version. To use the new parser, pass option { useNewUr
lParser: true } to MongoClient.connect.
[ { _id: 5bd03c00f68d6d19d854898a,
    CompanyID: '1',
    name: 'Marees Infotech',
    address: 'VIT Road, Vellore' },
  { _id: 5bd045a02359901b806cbfba,
    CompanyID: '1',
    name: 'Marees Infotech',
    address: 'VIT Road, Vellore' } ]

C:\Users\admin>
```

C:\Users\admin\node_update.js

```javascript
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 = { name: " Infotech" };
  var newvalues = { $set: {name: "Industries", address:
                           "Near Vellore Port " } };
  dbo.collection("customers").updateOne(myquery, newvalues,
function(err, res) {
    if (err) throw err;
    console.log("1 document updated");
    db.close();  });});
```

```
C:\Users\admin>node marees_node_mongodb_update.js
(node:2616) DeprecationWarning: current URL string parser is deprecated, and wil
l be removed in a future version. To use the new parser, pass option { useNewUrl
Parser: true } to MongoClient.connect.
1 document updated

C:\Users\admin>
```

```
> db.customers.find().pretty();
{
        "_id" : ObjectId("5bd03b0cceec371f78bede66"),
        "name" : "Company Inc",
        "address" : "Highway 37"
}
{

        "_id" : ObjectId("5bd03c00f68d6d19d854898a"),
        "CompanyID" : "1",
        "name" : "Mareeswari Industries",
        "address" : "Near Vellore Port "
}
{

        "_id" : ObjectId("5bd045a02359901b806cbfba"),
        "CompanyID" : "1",
        "name" : "Marees Infotech",
        "address" : "VIT Road, Vellore"
}
>
```

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