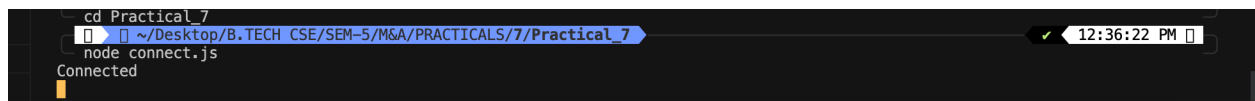


MICROSERVICES

PRACTICAL -7

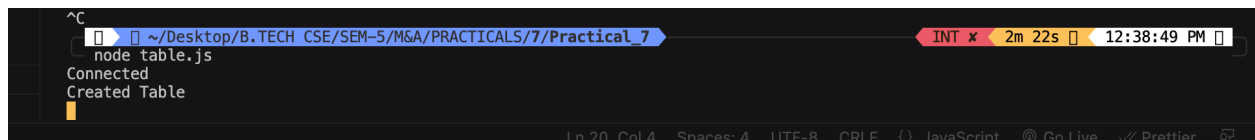
AIM:Anurag is selling clothes online to his customers via his website. He wants to manage his customer's records and forthat, he wants to perform the following CRUD operations using MySQL and nodeJS:

Connection Establishment:

A terminal window with a dark background. The prompt is 'cd Practical_7'. The user has entered 'node connect.js'. The output is 'Connected'. The terminal title bar shows the file path and a timestamp of 12:36:22 PM.

```
cd Practical_7
node connect.js
Connected
```

Table Created:

A terminal window with a dark background. The prompt is 'node table.js'. The output is 'Created Table'. The terminal title bar shows the file path, a timestamp of 12:38:49 PM, and some status icons.

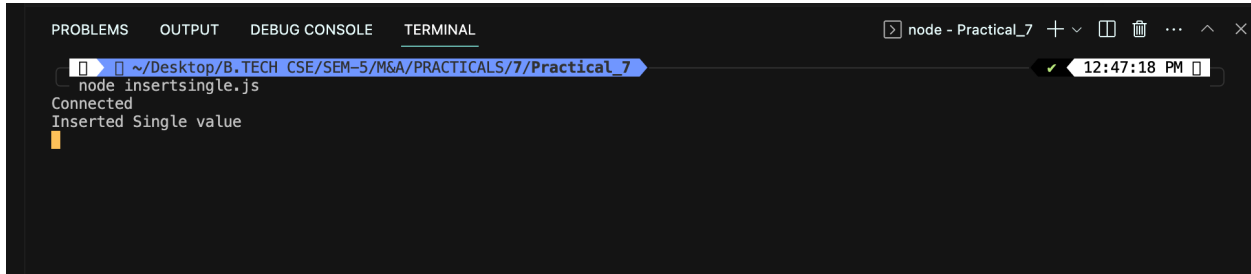
```
node table.js
Created Table
```

Practical 7.1: Add new customer in Customers with (name,phon_no,order_id).

```
var mysql=require('mysql');
var con =mysql.createConnection(
{
host:"localhost",
user:"root",
password:"Raj@2809",
database:"microservices"
}
);
con.connect(function(err)
{
if(err) throw err;
console.log("Connected");
con.query("insert into customers (order_id,name,address,phonenum,age)
VALUES (500,'abcde','Shilaj',12345,40);" ,function (err,result )
```

```
{  
if(err) throw err;  
console.log("Inserted Single value");  
  
});  
});
```

Output:



```
node - Practical_7  
~ /Desktop/B.TECH CSE/SEM-5/M&A/PRACTICALS/7/Practical_7  
node insertsingle.js  
Connected  
Inserted Single value
```

Practical 7.2: Add bulk of customers at the same time.

```
var mysql=require("mysql");  
  
var con=mysql.createConnection({  
host:"localhost",  
user:"root",  
password:"Raj@2809",  
database:"microservices"  
});  
con.connect(function(err){  
if(err) throw err;  
console.log("Database Connected");  
});  
var sql="INSERT INTO CUSTOMERS (order_id,name,address,phonenumner,age) VALUES ?";  
var values=[  
[11,'rohit','Shilaj',12345,40],  
[12,'RAJ','AHD',545454,40],  
[13,'YASH','RJT',462141,40],  
[14,'MANTHAN','GOTA',57647,40],  
[15,'SARTHAK','GNDHNGR',65622,40],  
]  
con.query(sql,[values],function(err,result){  
if(err) throw err;  
console.log("Successfully inserted into customers table");  
console.log("Number of Records Affected" +result.affectedRows);  
});
```

Output:

```
node task_2.js
Database Connected
Successfully inserted into customers table
Number of Records Affected5
```

order_id	name	address	phonenummer	age	
2	vikas	chandigarh	1232435454	30	
3	yashcba	punjab	43432343	32	
4	abc	sciencecity	434343243	30	
5	yash_gnu	jodphur	21244354	37	
11	rohit	Shilaj	12345	40	
12	RAJ	AHD	545454	40	
13	YASH	RJT	462141	40	
14	MANTHAN	GOTA	57647	40	
15	SARTHAK	GNDHNGR	65622	40	
NULL	NULL	NULL	NULL	NULL	

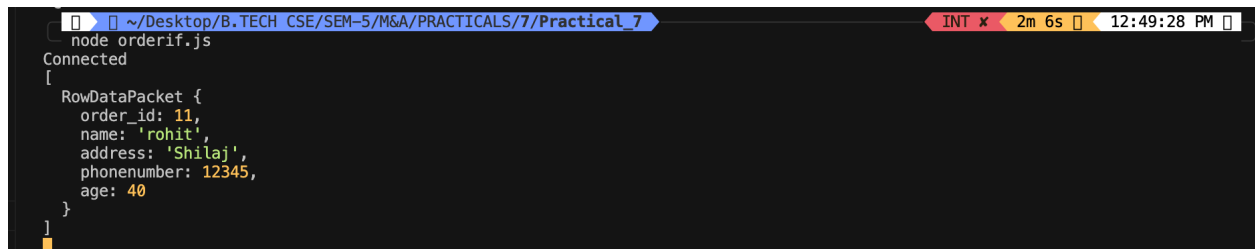
Practical 7.3: only display those customer details whose order_id=111

```
var mysql=require('mysql');
var con =mysql.createConnection(
{
host:"localhost",
user:"root",
password:"Raj@2809",
database:"microservices"
});
con.connect(function(err)
{
if(err) throw err;
console.log("Connected");
con.query("SELECT * FROM customers WHERE order_id=11" ,function (err,result )
{
```

```
if(err) throw err;
console.log(result);

});
});
```

OUTPUT:

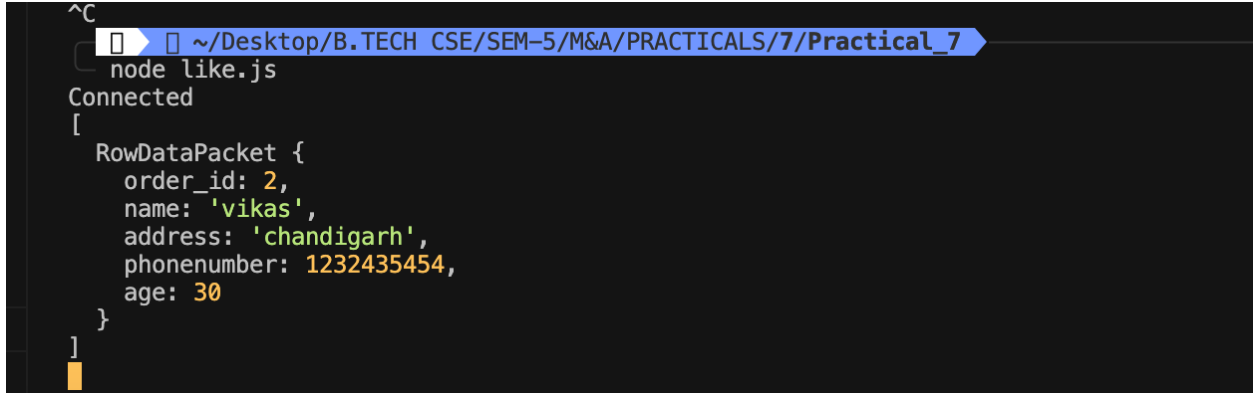


```
node orderif.js
Connected
[
  RowDataPacket {
    order_id: 11,
    name: 'rohit',
    address: 'Shilaj',
    phonenumber: 12345,
    age: 40
  }
]
```

Practical 7.4: Select records where the address starts with the letter 'S'

```
var mysql=require('mysql');
var con =mysql.createConnection(
{
host:"localhost",
user:"root",
password:"Raj@2809",
database:"microservices"
}
);
con.connect(function(err)
{
if(err) throw err;
console.log("Connected");
con.query("SELECT * FROM customers WHERE name LIKE '%S' " ,function (err,result )
{
if(err) throw err;
console.log(result);

});
});
```



```
^C
~/Desktop/B.TECH CSE/SEM-5/M&A/PRACTICALS/7/Practical_7
node like.js
Connected
[
  RowDataPacket {
    order_id: 2,
    name: 'vikas',
    address: 'chandigarh',
    phonenumber: 1232435454,
    age: 30
  }
]
```

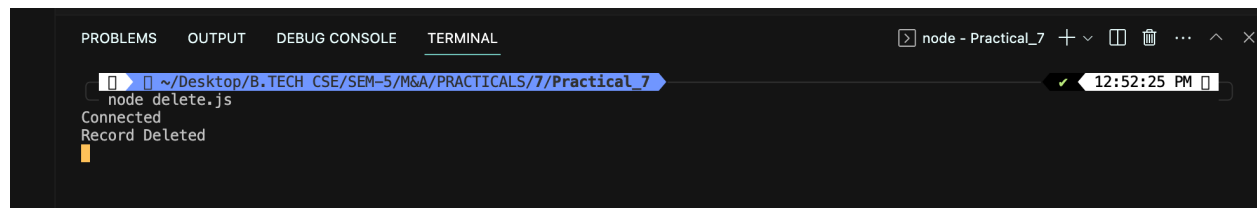
Practical 7.5: Sort the customer list alphabetically by name

```
var mysql=require('mysql');
var con =mysql.createConnection(
{
host:"localhost",
user:"root",
password:"Raj@2809",
database:"microservices"
}
);
con.connect(function(err)
{
if(err) throw err;
console.log("Connected");
con.query("select * from customers order by order_id;" ,function (err,result )
{
if(err) throw err;
console.log(result);
});
});
```

```
Connected
[
  RowDataPacket {
    order_id: 2,
    name: 'vikas',
    address: 'chandigarh',
    phonenumber: 1232435454,
    age: 30
  },
  RowDataPacket {
    order_id: 3,
    name: 'yashcba',
    address: 'punjab',
    phonenumber: 43432343,
    age: 32
  },
  RowDataPacket {
    order_id: 4,
    name: 'abc',
    address: 'sciencecity',
    phonenumber: 434343243,
    age: 30
  },
  RowDataPacket {
    order_id: 5,
    name: 'yash_gnu',
    address: 'jodphur',
    phonenumber: 21244354,
    age: 37
  },
  RowDataPacket {
    order_id: 11,
    name: 'rohit',
    address: 'Shilaj',
    phonenumber: 12345,
    age: 40
  },
  RowDataPacket {
    order_id: 12,
    name: 'RAJ',
    address: 'AHD',
    phonenumber: 545454,
    age: 40
  },
  RowDataPacket {
    order_id: 13,
```

Practical 7.6: Delete any record with the phone_no "12345"

```
var mysql=require('mysql');
var con =mysql.createConnection(
{
host:"localhost",
user:"root",
password:"Raj@2809",
database:"microservices"
}
);
con.connect(function(err)
{
if(err) throw err;
console.log("Connected");
con.query("delete from customers WHERE phonenumber = 12345;" ,function (err,result )
{
if(err) throw err;
console.log("Record Deleted");
});
});
```



Practical 7.7: Create an API to post customer records.

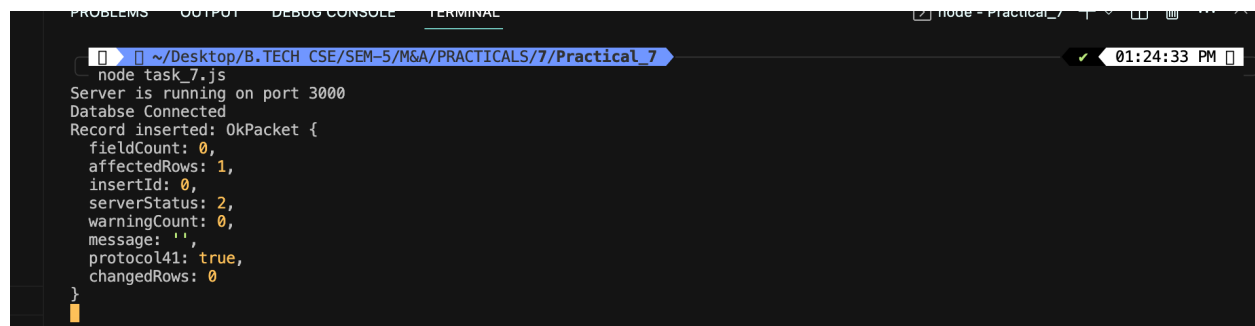
```
var mysql=require("mysql");
var express=require("express");
var app=express();
const bodyParser = require("body-parser");
app.use(express.urlencoded({extended:true}));
app.use(bodyParser.json());

var con=mysql.createConnection({
host:"localhost",
user:"root",
```

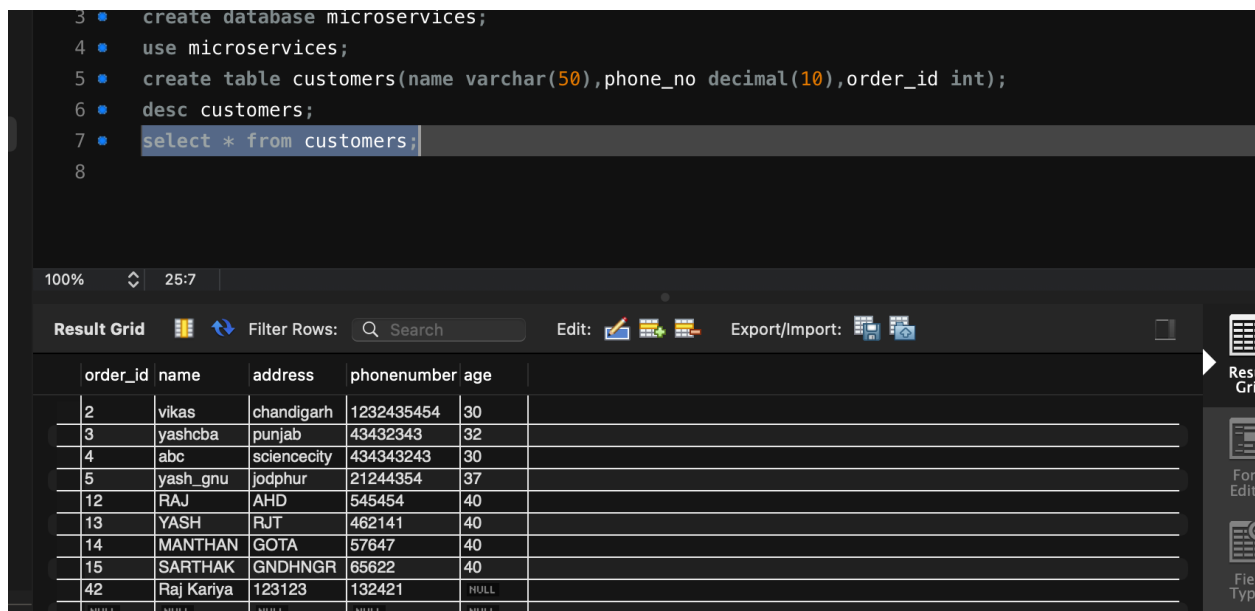
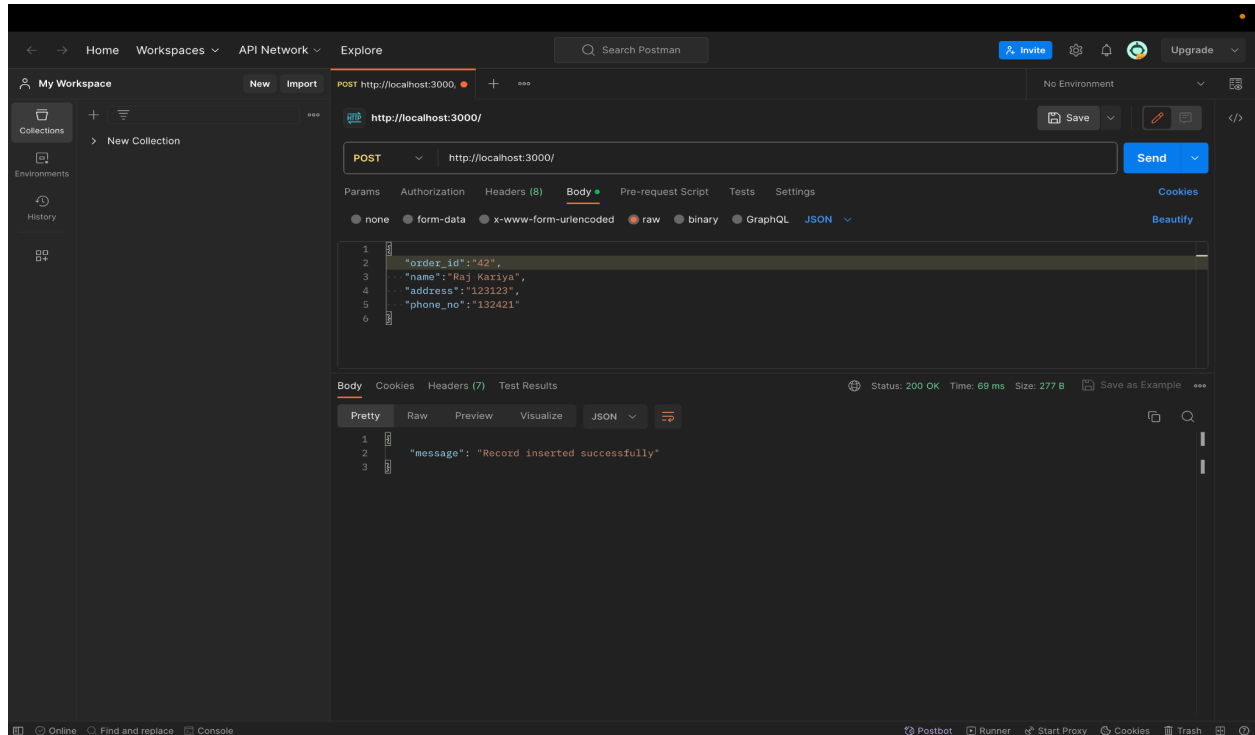
```
password:"Raj@2809",
database:"microservices"
});
con.connect(function(err){
  if(err) throw err
  console.log("Database Connected");
});
app.post("/", function (req, res) {
  var { order_id, name, address, phone_no } = req.body;
  if (!order_id || !name || !address || !phone_no) {
    return res.status(400).json({ message: "Missing required fields" });
  }
  var sql =
    "INSERT INTO customers (order_id, name, address, phonenumber) VALUES (?, ?, ?, ?)";
  con.query(sql, [order_id, name, address, phone_no], function (err, result) {
    if (err) {
      console.error("Error inserting data:", err);
      return res.status(500).json({ message: "Internal Server Error" });
    }
    console.log("Record inserted:", result);
    return res.status(200).json({ message: "Record inserted successfully" });
  });
});

app.listen(3000, () => {
  console.log(`Server is running on port 3000`);
});
```

OUTPUT:



```
node task_7.js
Server is running on port 3000
Database Connected
Record inserted: OkPacket {
  fieldCount: 0,
  affectedRows: 1,
  insertId: 0,
  serverStatus: 2,
  warningCount: 0,
  message: '',
  protocol41: true,
  changedRows: 0
}
```

In this picture we can see that the data is added.