**LAB 11**

**TASK**

const express = require('express');// used for routing

var mysql = require('mysql');

const app = express();// instance of server is created

const port = 3000;//run on this port

const path = require('path');

app.listen(port, function(){                          // connecting to a server

    console.log(`Listening on port ${port}...`);

});

    var connection = mysql.createConnection({

    host: "localhost",

    user: "root",

    password: "123456",

    database: "northwind"

});

connection.connect(function(err) {                // connecting to DBMS

    if (err) throw err;

    console.log("Connected!");

       });

app.get('/login', function(req, res) {

    res.sendFile(path.join(\_\_dirname, 'login.html'));

});

/\*

app.get('/index', function(req, res) {

    res.sendFile(path.join(\_\_dirname, 'index.html'));

});

\*/

app.get('/xyz', function(req, res) {

    res.send('abyuhcihijjnm');

});

app.get('/abc', function(req, res) {

    res.send('This is Lab 11');

});

app.get('/query',function(req,res) {          // Request to create table Students in northwind database

    let sql = "SELECT ProductName, UnitPrice FROM Products WHERE UnitPrice BETWEEN 10 AND 20 ORDER BY UnitPrice ASC";

    connection.query(sql,function(err,results){

        if (err) throw err;

        res.send(results);

    });

});

**LAB 12**

**TASK 1:** **Retrieve a list of the top 5 categories that have the highest average unit price for their products. All questions’ Output should be in this format on localhost:3000.**

const express = require('express');// used for routing

const mysql = require('mysql');

const app = express();// instance of server is created

const port = 3000;//run on this port

const path = require('path');

app.listen(port, function() { // connecting to a server

    console.log(`Listening on port ${port}...`);

});

const connection = mysql.createConnection({

    host: "localhost",

    user: "root",

    password: "123456",

    database: "northwind"

});

connection.connect(function(err) { // connecting to DBMS

    if (err) throw err;

    console.log("Connected!");

});

app.get('/', function(req, res) {

    let sql = "CREATE DATABASE IF NOT EXISTS Lab12\_Database";

    connection.query(sql, function(err, results) {

        if (err) throw err;

        res.send(results);

        console.log('Database Created');

    });

});

app.get('/login', function(req, res) {

    res.sendFile(path.join(\_\_dirname, 'login.html'));

});

app.get('/xyz', function(req, res) {

    res.send('abyuhcihijjnm');

});

app.get('/abc', function(req, res) {

    res.send('This is Lab 11');

});

app.get('/query', function(req, res) { // Request to create table Students in northwind database

    let sql = "SELECT c.CategoryName, AVG(p.UnitPrice) AS AveragePrice FROM Products p INNER JOIN Categories c ON p.CategoryID = c.CategoryID GROUP BY c.CategoryName ORDER BY AveragePrice DESC LIMIT 5";

    connection.query(sql, function(err, results) {

        if (err) throw err;

        res.send(results);

    });

});

**TASK 2:** **Retrieve a list of all customers who have placed an order in the year 1996, ordered by company name.**

const express = require('express');

const mysql = require('mysql');

const app = express();

const port = 3000;

const path = require('path');

app.listen(port, function() {

    console.log(`Listening on port ${port}...`);

});

const connection = mysql.createConnection({

    host: "localhost",

    user: "root",

    password: "123456",

    database: "northwind"

});

connection.connect(function(err) {

    if (err) throw err;

    console.log("Connected!");

});

app.get('/', function(req, res) {

    let sql = "CREATE DATABASE IF NOT EXISTS Lab12\_Database";

    connection.query(sql, function(err, results) {

        if (err) throw err;

        res.send(results);

        console.log('Database Created');

    });

});

app.get('/login', function(req, res) {

    res.sendFile(path.join(\_\_dirname, 'login.html'));

});

app.get('/xyz', function(req, res) {

    res.send('abyuhcihijjnm');

});

app.get('/abc', function(req, res) {

    res.send('This is Lab 11');

});

app.get('/query', function(req, res) {

    let sql = "SELECT DISTINCT c.CompanyName " +

              "FROM Customers c " +

              "INNER JOIN Orders o ON c.CustomerID = o.CustomerID " +

              "WHERE YEAR(o.OrderDate) = 1996 " +

              "ORDER BY c.CompanyName";

    connection.query(sql, function(err, results) {

        if (err) throw err;

        res.send(results);

    });

});

**TASK 3: Retrieve a list of all employees who have a last name starting with the letter "S", ordered by last name and first name.**

const express = require('express');// used for routing

const mysql = require('mysql');

const app = express();// instance of server is created

const port = 3000;//run on this port

const path = require('path');

app.listen(port, function(){ // connecting to a server

    console.log(`Listening on port ${port}...`);

});

const connection = mysql.createConnection({

    host: "localhost",

    user: "root",

    password: "123456",

    database: "northwind"

});

connection.connect(function(err) { // connecting to DBMS

    if (err) throw err;

    console.log("Connected!");

});

app.get('/', function(req, res) {

    let sql = "CREATE DATABASE IF NOT EXISTS Lab12\_Database";

    connection.query(sql, function(err, results){

        if (err) throw err;

        res.send(results);

        console.log('Database Created');

    });

});

app.get('/login', function(req, res) {

    res.sendFile(path.join(\_\_dirname, 'login.html'));

});

app.get('/xyz', function(req, res) {

    res.send('abyuhcihijjnm');

});

app.get('/abc', function(req, res) {

    res.send('This is Lab 11');

});

app.get('/query', function(req, res) { // Request to create table Students in northwind database

    let sql = "SELECT FirstName, LastName FROM Employees WHERE LastName LIKE 'S%' ORDER BY LastName, FirstName";

    connection.query(sql, function(err, results){

        if (err) throw err;

        res.send(results);

    });

});

**Task 4: Retrieve a list of all products that have been discontinued, along with the supplier name and contact information.**

const express = require('express');

const mysql = require('mysql');

const app = express();

const port = 3000;

const path = require('path');

app.listen(port, function() {

  console.log(`Listening on port ${port}...`);

});

const connection = mysql.createConnection({

  host: "localhost",

  user: "root",

  password: "123456",

  database: "northwind"

});

connection.connect(function(err) {

  if (err) throw err;

  console.log("Connected!");

});

app.get('/', function(req, res) {

  res.sendFile(path.join(\_\_dirname, 'login.html'));

});

app.get('/xyz', function(req, res) {

  res.send('abyuhcihijjnm');

});

app.get('/abc', function(req, res) {

  res.send('This is Lab 11');

});

app.get('/query', function(req, res) {

  let sql = "SELECT p.ProductName, s.CompanyName AS SupplierName, s.ContactName, s.ContactTitle, s.Address, s.City, s.Region, s.PostalCode, s.Country, s.Phone, s.Fax " +

            "FROM Products p " +

            "INNER JOIN Suppliers s ON p.SupplierID = s.SupplierID " +

            "WHERE p.Discontinued = 1";

  connection.query(sql, function(err, results) {

    if (err) throw err;

    res.send(results);

  });

});