

Node.JS

Practice – 5

Overview

*In this hands-on session you will continue learning **Node.js**. Upon completion of this hands-on session, you should be able to:*

- *Connect to the MySQL Database Server*
 - *Gracefully close the database connection*
 - *Have knowledge of database connection pool*
- *Create a Database Table*
- *Perform CRUD operations on a database table*
 - *Insert a row. Use placeholder during insertion*
 - *Query the table*
 - *Make changes to the database table*
 - *Remove unwanted row(s)*
- *Invoke Stored Procedures from Node.js Application*

Hands-on

1. Check if MySQL module is installed.

If **NO**, install the MySQL module.

2. Start your MySQL Server and get a list of databases you have.

You are suppose to create a database by name HR_DB using your MySQL command.

Confirm, that the database is created.

3. Your challenge now is to write a program which help us to connect to the MySQL HR_DB database

HINT: You should be using **createConnection()** method

Run, you Node.js program and confirm that it is establishing a connection.

Gracefully close the database connection.

4. Your next challenge is to create a table with the following details:

Table Name : **Departments**

Column Details

deptID	int	Primary Key	Auto Incrment
deptName	varchar(15)	Not Null	
city	varchar(10)	Not Null	

Care should be taken to handle errors if any.

Run the program and check if it creates a table by the specified name in HR_DB database

5. You next challenge is to insert the following rows

DEPTID	DEPTNAME	CITY
1	ACCOUNTING	NEW YORK
2	RESEARCH	DALLAS
3	SALES	CHICAGO
4	OPERATIONS	BOSTON
5	R&D	PUNE

[a] By directly supplying the given literals.

[b] By passing values for placeholders.

[c] Use command line arguments to pass values for placeholders.

Your task is to check the above sub-tasks with each program.

6. The HR department now want to query the HR_DB – departments table

The have the following queries:

[a] Get all the rows

[b] Get row(s) for a specific city

HINT: Use placeholder.

NOTE: There is a 'readline' core module which will enable a Node.js program to accept the data.

[c] Get row(s) for a specific department

Your challenge is to write a application which help the HR department staff to query the above given requirements.

7. The company has decided to perform all its financial activities from the TEXAS city.

Write a program which will help the staff members of HR database to update the accounting department city to TEXAS

Check the number of records updated.

8. The company has decided to offshore the R&D tasks to another company. Thus the department is being dissolved.

Your challenge is to remove the 'R&D' department from the departments table of the HR_DB database

Make sure to check the number of record(s) deleted.

Record your observation!