School of Computer Science Engineering and Technology

Course- B.Tech
Course Code- CSET231

Type- Elective (Full Stack)
Course Name- Programming
Methodologies for Backend Development

Year- 2022-23
Date- 20-Apr-2023

Semester- Even
Batch- (4th semester) Full Stack
specialization

Lab Assignment (Week 11, Assignment 19)

CO-Mapping

Exp. No.	Name	CO1	CO2	CO3
19	Create a database with GraphQL	--	✓	✓

Objective: To learn to create a database with GraphQL.

Install nodejs and follow below steps to create a web based application of GraphQL using nodejs

1. Create a blank folder and use npm init to create a blank nodejs project
2. Use npm install –save express express-graphql graphql cors to install required packages
3. Create a schema of books in graphql as shown below:

```
type Course {
id: Int
title: String
author: String
description: String
topic: String
url: String
}
```

4. Create below queries in graphql:

```
type Query {
course(id: Int!): Course
courses(topic: String): [Course]
}
```

5. Define data of few books in an array in server.js

```
var coursesData = [
{
id: 1,
title: 'The Complete Node.js Developer Course',
author: 'Andrew Mead, Rob Percival',
description: 'Learn Node.js by building real-world applications with Node,
Express, MongoDB, Mocha, and more!',
```

```
topic: 'Node.js',
url: 'https://codingthesmartway.com/courses/nodejs/'
},…]
```

6. Execute node server.js to start graphql server
7. Execute query and get results as shown in screen below: