



*"Heaven's Light is Our Guide"*

**Rajshahi University of Engineering &  
Technology**  
**Department of Electrical & Computer Engineering**

**Course Title**

**Data Base Systems Sessional**

**Course No: ECE 2216**

**Lab Report No. 01**

**RUET**

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<u>Submitted to:</u>	<u>Submitted by:</u>
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## Experiment No: 01

**Experiment Name:** Create a database system for class 21 where there are 2 tables for odd and even batch containing following information for 10 students- ID, Name, Contact, Blood Group, Major Subject, Obtained Marks.


**Objective:** The aim of this lab is to design and develop a structured database system using SQL, emphasizing Data Definition Language (DDL) and Data Manipulation Language (DML) functions. The main goal is to provide hands-on practice in creating, altering, and managing database schemas through DDL commands like CREATE, ALTER, DROP, and TRUNCATE, and to manipulate the data using DML commands such as INSERT, UPDATE, DELETE, and SELECT. This task is intended to help students understand how to define database tables, apply constraints, and perform basic data operations, equipping them with essential skills for real-world database management.

### Query and Output:

Creating a database named Class-21:

Run SQL query/queries on server "localhost": 

```
1 CREATE DATABASE `Class-21`;
```

☐ Bind parameters 

Bookmark this SQL query:

Delimiter  ☐ Show this query here again ☐ Retain query box ☐ Rollback when finished ☒ Enable foreign key checks

Output:

Recent Favourites

New

- Class-21
- information\_schema
- mysql
- performance\_schema
- phpmyadmin
- test

Show query box

✓ MySQL returned an empty result set (i.e. zero rows). (Query took 0.0009 seconds.)

```
CREATE DATABASE `Class-21`;
```

[ [Edit inline](#) ] [ [Edit](#) ] [ [Create PHP code](#) ]

⚠ Error: #1046 No database selected

Creating a Table for odd\_sem students:

### Run SQL query/queries on database Class-21: ?

```
1 CREATE TABLE odd_sem(  
2     id INT,  
3     name VARCHAR(255),  
4     contact VARCHAR(255),  
5     blood_g VARCHAR(255),  
6     major_sub VARCHAR(255),  
7     marks INT  
8 )  
9
```

Output:

The screenshot shows a database management tool interface. On the left, a sidebar lists various databases and schemas, including 'Class-21', 'information\_schema', 'mysql', 'performance\_schema', 'phpmyadmin', and 'test'. The main area displays a green status bar indicating that the MySQL query returned an empty result set (zero rows) and took 0.0021 seconds to execute. Below this, the SQL query is shown: `CREATE TABLE odd_sem( id INT, name VARCHAR(255), contact VARCHAR(255), blood_g VARCHAR(255), major_sub VARCHAR(255), marks INT );`. At the bottom, there are links for '[ Edit inline ]', '[ Edit ]', and '[ Create PHP code ]'.

Inserting 10 students data in the odd\_sem table:

The screenshot shows the same database management tool interface. The main area displays a status bar indicating that the MySQL query returned 10 rows and took 0.0021 seconds to execute. Below this, the SQL query is shown: `INSERT INTO odd_sem(id,name,contact,blood_g,major_sub,marks) VALUES (1, 'Sadik', 01765543, 'O+', 'EEE', 76), (2, 'Rahim', 01876554, 'A+', 'CSE', 82), (3, 'Karim', 01988765, 'B+', 'CSE', 67), (4, 'Mina', 01766543, 'AB-', 'CSE', 73), (5, 'Sara', 01654321, 'O-', 'EEE', 88), (6, 'Jamal', 01890987, 'A-', 'CSE', 70), (7, 'Lina', 01567892, 'B-', 'EEE', 65), (8, 'Hasan', 01775643, 'AB+', 'CSE', 92), (9, 'Tina', 01698567, 'O+', 'EEE', 78), (10, 'Rafiq', 01965432, 'A+', 'CSE', 80);`. The left sidebar shows the 'odd\_sem' table selected under the 'Class-21' database.

Output:

Showing rows 0 - 9 (10 total, Query took 0.0005 seconds.)

```
SELECT * FROM `odd_sem`
```

☐ Profiling [ [Edit inline](#) ] [ [Edit](#) ] [ [Explain SQL](#) ] [ [Create PHP code](#) ] [ [Refresh](#) ]

☐ Show all | Number of rows: 25 | Filter rows:

Extra options

id	name	contact	blood_g	major_sub	marks
1	Sadik	1765543	O+	EEE	76
2	Rahim	1876554	A+	CSE	82
3	Karim	1988765	B+	CSE	67
4	Mina	1766543	AB-	CSE	73
5	Sara	1654321	O-	EEE	88
6	Jamal	1890987	A-	CSE	70
7	Lina	1567892	B-	EEE	65
8	Hasan	1775643	AB+	CSE	92
9	Tina	1698567	O+	EEE	78
10	Rafiq	1965432	A+	CSE	80

☐ Show all | Number of rows: 25 | Filter rows:

Creating a Table for even\_semester students:

Run SQL query/queries on table **Class-21.odd\_sem**:

```
1 CREATE TABLE even_sem(
2
3     id INT,
4     name VARCHAR(255),
5     contact INT,
6     blood_g VARCHAR(255),
7     major_sub VARCHAR(255),
8     marks INT
9
10 )
11
```

SELECT \* | SELECT | INSERT | UPDATE | DELETE | Clear | Format | Get auto-saved query

☐ Bind parameters

Bookmark this SQL query:

Delimiter: ; ☐ Show this query here again ☐ Retain query box ☐ Rollback when finished ☒ Enable foreign key checks

Output:

Show query box

MySQL returned an empty result set (i.e. zero rows). (Query took 0.0003 seconds.)

```
CREATE TABLE even_sem( id INT, name VARCHAR(255), contact INT, blood_g VARCHAR(255), major_sub VARCHAR(255), marks INT );
```

[ [Edit inline](#) ] [ [Edit](#) ] [ [Create PHP code](#) ]

Inserting 10 students data in the even\_sem table:

Run SQL query/queries on table Class-21.even\_sem:

```
1 INSERT INTO even_sem(id,name,contact,blood_g,major_sub,marks) VALUES
2 (1, 'Zara', 01754321, 'B+', 'EEE', 74),
3 (2, 'Nabil', 01867890, 'O-', 'CSE', 85),
4 (3, 'Farhan', 01912345, 'A+', 'EEE', 69),
5 (4, 'Rima', 01798765, 'AB+', 'CSE', 90),
6 (5, 'Shamim', 01623456, 'O+', 'EEE', 77),
7 (6, 'Tahmid', 01987654, 'A-', 'CSE', 83),
8 (7, 'Sadia', 01865432, 'B-', 'CSE', 71),
9 (8, 'Imran', 01776543, 'O-', 'EEE', 89),
10 (9, 'Joya', 01609876, 'AB-', 'EEE', 75),
11 (10, 'Hassan', 01934567, 'A+', 'CSE', 81);
12
```

SELECT \* SELECT INSERT UPDATE DELETE Clear Format Get auto-saved query

☐ Bind parameters

Bookmark this SQL query:

Delimiter: ; ☐ Show this query here again ☐ Retain query box ☐ Rollback when finished ☒ Enable foreign key checks Go

Output:

Showing rows 0 - 9 (10 total, Query took 0.0002 seconds.)

SELECT \* FROM `even\_sem`

☐ Profiling [ Edit inline ] [ Edit ] [ Explain SQL ] [ Create PHP code ] [ Refresh ]

☐ Show all | Number of rows: 25 Filter rows: Search this table

Extra options

id	name	contact	blood_g	major_sub	marks
1	Zara	1754321	B+	EEE	74
2	Nabil	1867890	O-	CSE	85
3	Farhan	1912345	A+	EEE	69
4	Rima	1798765	AB+	CSE	90
5	Shamim	1623456	O+	EEE	77
6	Tahmid	1987654	A-	CSE	83
7	Sadia	1865432	B-	CSE	71
8	Imran	1776543	O-	EEE	89
9	Joya	1609876	AB-	EEE	75
10	Hassan	1934567	A+	CSE	81

☐ Show all | Number of rows: 25 Filter rows: Search this table