DBMS PRACTICAL LAB DAY 2

(S.BARANI,192211152)

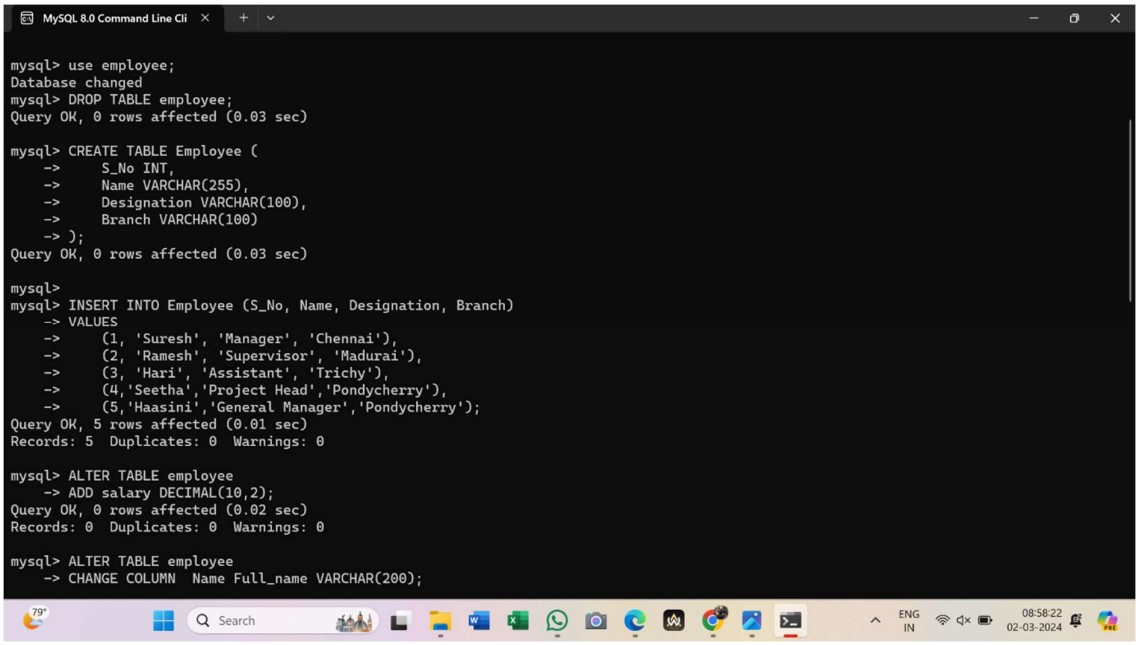
Q.NO.1

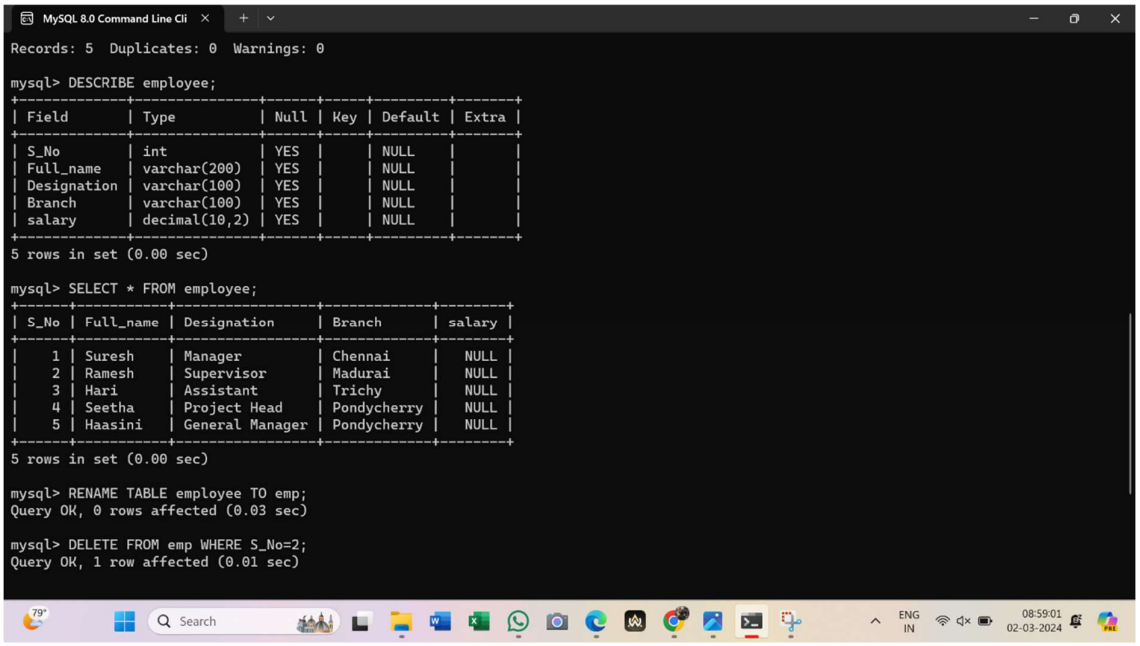
1.Create Employee table for the following details

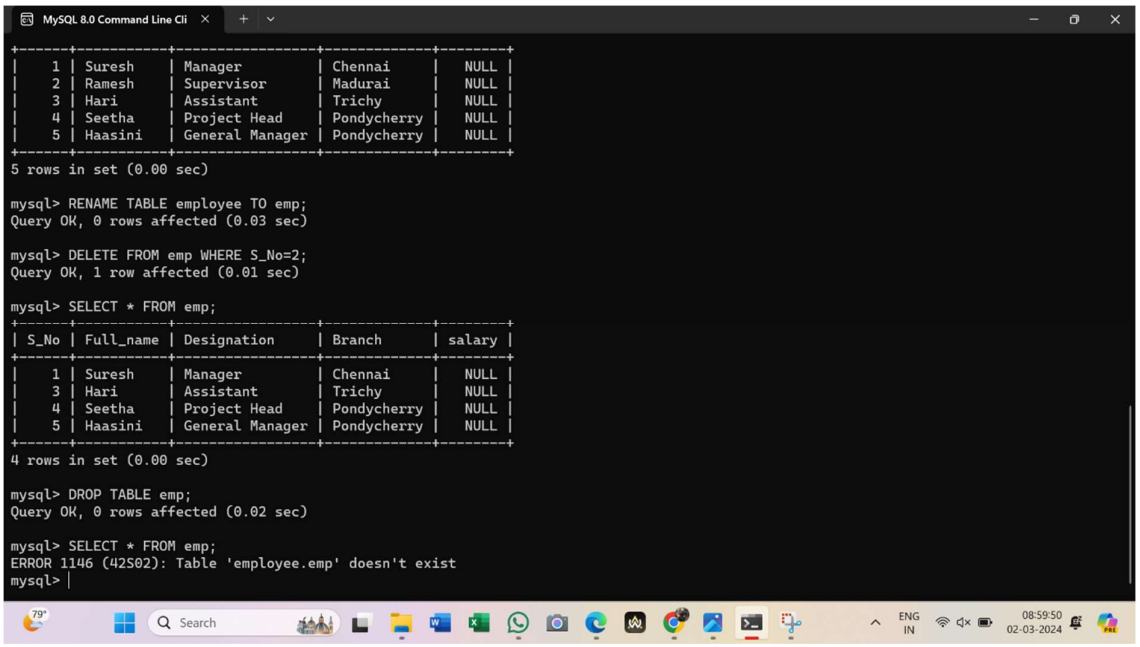
S.No	Name	Designation	Branch
1	Suresh	Manager	Chennai
2	Ramesh	Supervisor	Madurai
3	Hari	Assistant	Trichy

Perform the following:

- Alter the table by adding a column **Salary**
- Alter the table by modifying the column **Name**
- Describe the table **employee**
- Rename table **employee** as **emp**
- Delete the Second row from the table
- Drop the table




MySQL 8.0 Command Line Cli
Records: 5 Duplicates: 0 Warnings: 0
mysql> DESCRIBE employee;
+-------------+---------------+------+-----+---------+-------+
| Field | Type | Null | Key | Default | Extra |
+-------------+---------------+------+-----+---------+-------+
S_No	int	YES		NULL	
Full_name	varchar(200)	YES		NULL	
Designation	varchar(100)	YES		NULL	
Branch	varchar(100)	YES		NULL	
salary	decimal(10,2)	YES		NULL	
+-------------+---------------+------+-----+---------+-------+
5 rows in set (0.00 sec)
mysql> SELECT * FROM employee;
+------+-----------+-----------------+-------------+--------+
| S_No | Full_name | Designation | Branch | salary |
+------+-----------+-----------------+-------------+--------+
1	Suresh	Manager	Chennai	NULL
2	Ramesh	Supervisor	Madurai	NULL
3	Hari	Assistant	Trichy	NULL
4	Seetha	Project Head	Pondycherry	NULL
5	Haasini	General Manager	Pondycherry	NULL
+------+-----------+-----------------+-------------+--------+
5 rows in set (0.00 sec)
mysql> RENAME TABLE employee TO emp;
Query OK, 0 rows affected (0.03 sec)
mysql> DELETE FROM emp WHERE S_No=2;
Query OK, 1 row affected (0.01 sec)
Search
ENG
IN
08:59:01
02-03-2024


MySQL 8.0 Command Line Cli
1	Suresh	Manager	Chennai	NULL
2	Ramesh	Supervisor	Madurai	NULL
3	Hari	Assistant	Trichy	NULL
4	Seetha	Project Head	Pondycherry	NULL
5	Haasini	General Manager	Pondycherry	NULL
5 rows in set (0.00 sec)
mysql> RENAME TABLE employee TO emp;
Query OK, 0 rows affected (0.03 sec)
mysql> DELETE FROM emp WHERE S_No=2;
Query OK, 1 row affected (0.01 sec)
mysql> SELECT * FROM emp;
1	Suresh	Manager	Chennai	NULL
3	Hari	Assistant	Trichy	NULL
4	Seetha	Project Head	Pondycherry	NULL
5	Haasini	General Manager	Pondycherry	NULL
4 rows in set (0.00 sec)
mysql> DROP TABLE emp;
Query OK, 0 rows affected (0.02 sec)
mysql> SELECT * FROM emp;
ERROR 1146 (42S02): Table 'employee.emp' doesn't exist
mysql>
Search
ENG
IN
08:59:50
02-03-2024

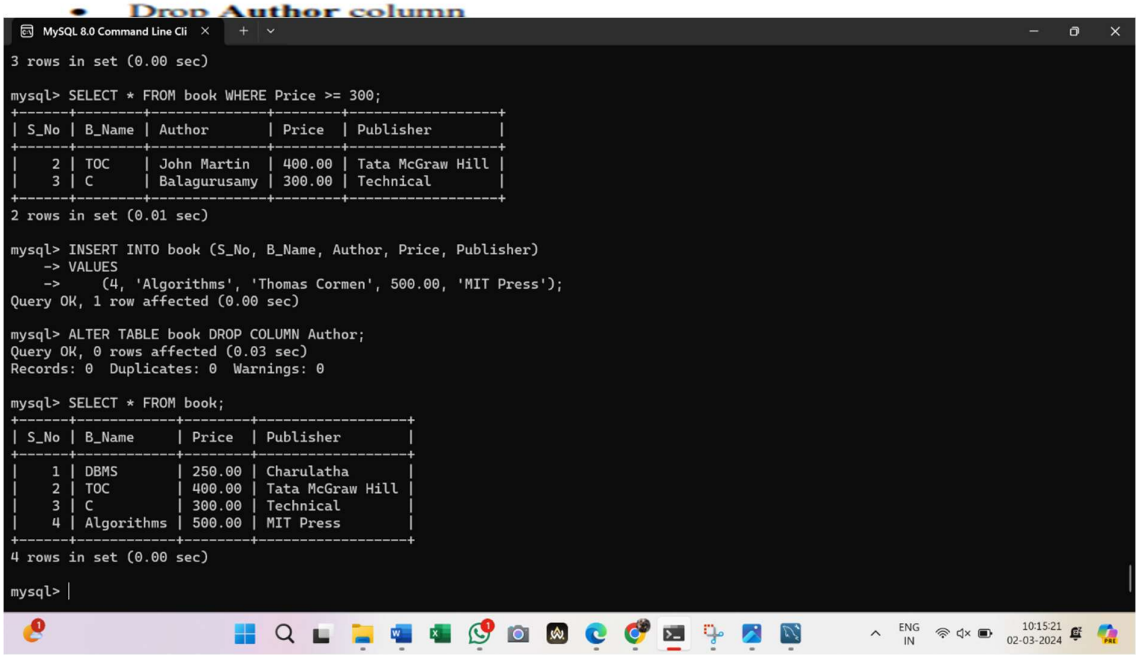
Q.NO.2

2.Create a Table as **book** and the details are

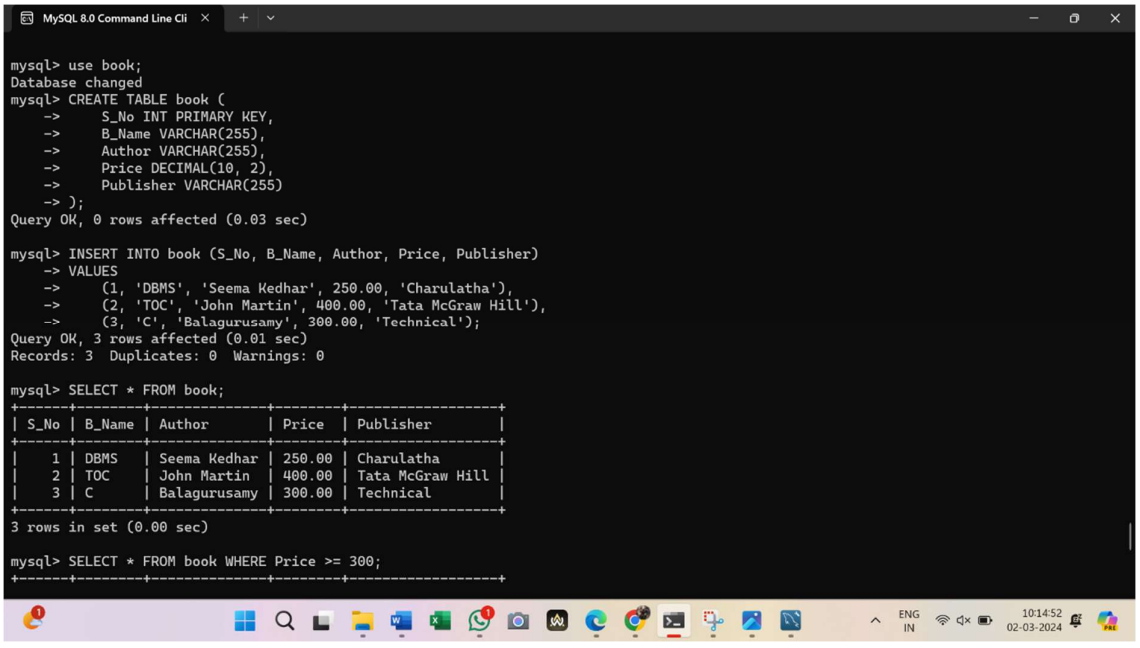
S. No	B_Name	Author	Price	Publisher
1	DBMS	Seema Kedhar	250	Charulatha
2	TOC	John Martin	400	Tata McGraw Hill
3	C	Balagurusamy	300	Technical

Perform the following:

- Use **Select** keyword and display the table
- Display the book which is => 300
- **Insert** a row and add new book to the book table
- Drop **Author** column



```
MySQL 8.0 Command Line Cli

3 rows in set (0.00 sec)

mysql> SELECT * FROM book WHERE Price >= 300;
+------+--------+-------------+--------+------------------+
| S_No | B_Name | Author      | Price  | Publisher        |
+------+--------+-------------+--------+------------------+
|    2 | TOC    | John Martin | 400.00 | Tata McGraw Hill |
|    3 | C      | Balagurusamy| 300.00 | Technical        |
+------+--------+-------------+--------+------------------+
2 rows in set (0.01 sec)

mysql> INSERT INTO book (S_No, B_Name, Author, Price, Publisher)
    -> VALUES
    ->     (4, 'Algorithms', 'Thomas Cormen', 500.00, 'MIT Press');
Query OK, 1 row affected (0.00 sec)

mysql> ALTER TABLE book DROP COLUMN Author;
Query OK, 0 rows affected (0.03 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> SELECT * FROM book;
+------+------------+--------+------------------+
| S_No | B_Name     | Price  | Publisher        |
+------+------------+--------+------------------+
|    1 | DBMS       | 250.00 | Charulatha       |
|    2 | TOC        | 400.00 | Tata McGraw Hill |
|    3 | C          | 300.00 | Technical        |
|    4 | Algorithms | 500.00 | MIT Press        |
+------+------------+--------+------------------+
4 rows in set (0.00 sec)

mysql>
```



```
MySQL 8.0 Command Line Cli

mysql> use book;
Database changed
mysql> CREATE TABLE book (
    ->     S_No INT PRIMARY KEY,
    ->     B_Name VARCHAR(255),
    ->     Author VARCHAR(255),
    ->     Price DECIMAL(10, 2),
    ->     Publisher VARCHAR(255)
    -> );
Query OK, 0 rows affected (0.03 sec)

mysql> INSERT INTO book (S_No, B_Name, Author, Price, Publisher)
    -> VALUES
    ->     (1, 'DBMS', 'Seema Kedhar', 250.00, 'Charulatha'),
    ->     (2, 'TOC', 'John Martin', 400.00, 'Tata McGraw Hill'),
    ->     (3, 'C', 'Balagurusamy', 300.00, 'Technical');
Query OK, 3 rows affected (0.01 sec)
Records: 3  Duplicates: 0  Warnings: 0

mysql> SELECT * FROM book;
+------+--------+-------------+--------+------------------+
| S_No | B_Name | Author      | Price  | Publisher        |
+------+--------+-------------+--------+------------------+
|    1 | DBMS   | Seema Kedhar| 250.00 | Charulatha       |
|    2 | TOC    | John Martin | 400.00 | Tata McGraw Hill |
|    3 | C      | Balagurusamy| 300.00 | Technical        |
+------+--------+-------------+--------+------------------+
3 rows in set (0.00 sec)

mysql> SELECT * FROM book WHERE Price >= 300;
+------+--------+-------------+--------+------------------+
```

Q.NO.3

3.Write the DDL Commands for the following.
Create a table name STUDENT with following structure.

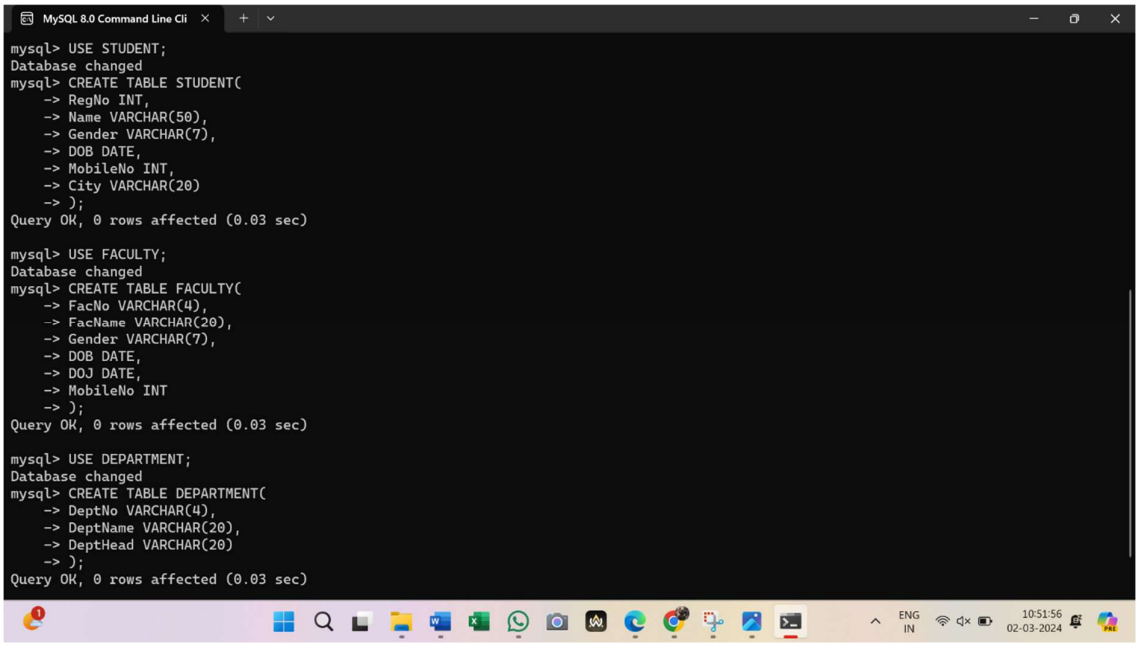
#	Column Name	Description	Data Type
1	RegNo	Registration Number	NUMBER(3)
2	Name	Student Name	VARCHAR(15)
3	Gender	Gender of the student	CHAR(1)
4	DOB	Date of Birth	DATE
5	MobileNo	Mobile Number	NUMBER(10)
6	City	Location of city	VARCHAR(15)

Create a table name FACULTY with following structure.

#	Column Name	Description	Data Type
1	FacNo	Faculty Identifier	VARCHAR(4)
2	FacName	Faculty Name	VARCHAR(15)
3	Gender	Gender of faculty	CHAR(1)
4	DOB	Date of Birth	DATE
5	DOJ	Date of Join	DATE
6	MobileNo	Mobile Number	NUMBER(10)

Create a table name DEPARTMENT with following structure.

#	Column Name	Description	Data Type
1	DeptNo	Department Identifier	VARCHAR(4)
2	DeptName	Department Name	VARCHAR(15)
3	DeptHead	Department Head	VARCHAR(4)



Q.NO.4

4. Write the DDL Commands with Constraints for the following.

Alter the table STUDENT with following structure.

#	Column Name	Constraints
1	RegNo	PRIMARY KEY
2	MobileNo	NOT NULL

Alter the table name FACULTY with following structure. The DeptNo in this table refers the DeptNo in the DEPARTMENT table.

#	Column Name	Constraints
1	FacNo	PRIMARY KEY
2	Gender	CHECK 'M' or 'F'

After the FACULTY table is successfully created, test if you can add a constraint FOREIGN KEY to the DeptNo of this table.

```
mysql> USE STUDENT
Database changed
mysql> ALTER TABLE STUDENT
    ->     MODIFY RegNo INT PRIMARY KEY,
    ->     MODIFY MobileNo VARCHAR(20) NOT NULL;
Query OK, 0 rows affected (0.06 sec)
Records: 0  Duplicates: 0  Warnings: 0
```

```
mysql> USE FACULTY;
Database changed
mysql> ALTER TABLE FACULTY
    ->     MODIFY FacNo INT PRIMARY KEY,
    ->     MODIFY Gender ENUM('M', 'F') NOT NULL,
    ->     ADD CONSTRAINT chk_gender CHECK (Gender IN ('M', 'F'));
Query OK, 0 rows affected (0.06 sec)
Records: 0  Duplicates: 0  Warnings: 0
```

Q.NO.5

Draw the ER diagram and its related SQL queries for the case scenario to implementation for HRM database