1. ER Diagram for hotel management system.
2. Create a table named Students with the following fields:
   • StudentID (Integer, Primary Key) • Name (Varchar) • Age (Integer) • Email (Varchar) Perform the following:
   1. Add a column Gender. 2. Modify the data type of Age to SMALLINT. 3. Drop the column Email. 4. Rename the table to StudentRecords
3. Create a table Products with the following fields:
   • ProductID (Primary Key) • ProductName • Category • Quantity • Price Tasks: 1. Add a column SupplierName. 2. Change Quantity data type to SMALLINT. 3. Drop the Category column. 4. Rename the table to Inventory.

4. Create a table Courses with: CourseID (Primary Key), CourseName, Credits, Instructor

   Tasks: 1. Add a column Semester.2. Change the data type of Credits from INT to FLOAT.3. Remove the Instructor column.4. Rename the table to AvailableCourses.

5. CREATE DATABASE CollegeDB; USE CollegeDB; CREATE TABLE emp and apply following commands:

   1. Insert more than a record into emp table using a single insert command.
   2. Update the emp table to set the salary of all employees to Rs15000/- who are working as Assistant Professor
   3. Delete only those who are working as lecturer

6. Consider following two tables

Employees Table:

EmpID	EmpName	DeptID	Salary
1	Alice	101	50000.00
2	Bob	102	60000.00
3	Charlie	101	55000.00
4	David	103	45000.00
5	Eva	102	65000.00

Department Table:

DeptID	DeptName
101	**HR**
102	**IT**
103	**Finance**

1. Count total employees
2. Find maximum and minimum salary
3. Find average salary per department
4. Use UNION ALL
5. Use innerjoin

7. Create table employee as follows:

OUTPUT:

ID	NAME	AGE	ADDRESS	SALARY
1	Ramesh	32	Ahmedabad	2000.00
2	Khilan	25	Delhi	1500.00
3	kaushik	23	Kota	2000.00
4	Chaitali	25	Mumbai	6500.00
5	Hardik	27	Bhopal	8500.00

- Create view
- Update view
- Delete View
- Drop view

8. Consider a database table **Customer (CustID, Name, City, Balance)** used to store customer details for a bank.
You are required to demonstrate the use of **TCL (Transaction Control Language) commands**: **COMMIT, ROLLBACK, and SAVEPOINT** using the following scenarios:

1. **Data Setup:**
   - Create the `Customer` table with the attributes `CustID`, `Name`, `City`, and `Balance`.
   - Insert at least **three initial records** and permanently save them using `COMMIT`.
2. **Use of ROLLBACK:**
   - Delete a customer record without using `COMMIT`.
   - Apply the `ROLLBACK` command to restore the deleted record.
3. **Use of SAVEPOINT:**
   - Insert three new customer records.
   - Create **two savepoints** after inserting the first and second records.

- Roll back to the second savepoint to undo the last insertion, while keeping the earlier ones intact.
- Finally, use `COMMIT` to save the correct state of the table.

9. An e-commerce website stores orders in **Orders(OrderID, CustomerName, ProductName, Amount)**.

1. Insert 3 orders and commit them.
2. Cancel (delete) an order but roll back to restore it.
3. Insert 3 new orders, creating savepoints.
4. Roll back to the first savepoint to undo later orders.
5. Commit the transaction and show final orders list.

10. **Create Customer Table:**

```
+---------+--------------+------+-----+---------+-------+
| Field   | Type         | Null | Key | Default | Extra |
+---------+--------------+------+-----+---------+-------+
| CustID  | int          | YES  |     | NULL    |       |
| Name    | varchar(50)  | YES  |     | NULL    |       |
| Age     | int          | YES  |     | NULL    |       |
| Address | varchar(100) | YES  |     | NULL    |       |
| Salary  | float        | YES  |     | NULL    |       |
+---------+--------------+------+-----+---------+-------+
5 rows in set (0.06 sec)
```

Write procedure
Call the procedure

11. Write function to Check if salary is above 10,000 on customer table.

12. Create a stored procedure that uses a cursor to display the names of employees who earn more than 50,000 from an employees table.