

GROUP # 16

HOTEL_CHAIN NORMALIZATION

TABLES ON MYSQL COMMAND LINE CLIENT



SUBMITTED TO MAM SEHRISH KHAN

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16

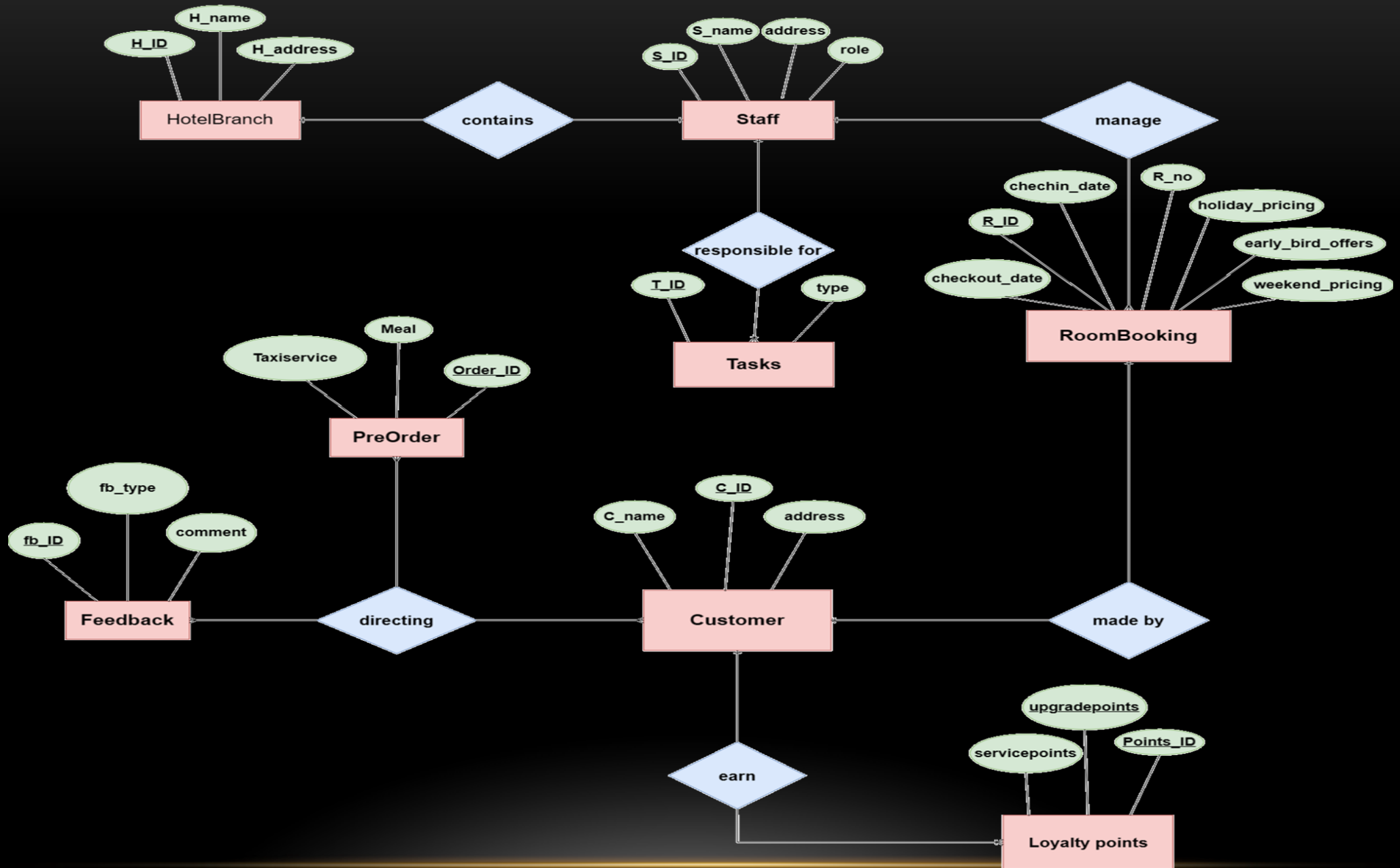
DATED:

05/01/2025

MOST COMMONLY USED KEYWORDS

- `create database database_name;`
- `use database;`
- `create table table_name(attribute datatype(size),...);`
- `INSERT INTO database_name values(attribute_name datatype(size));`
- `DESCRIBE table_name;` `select * from table_name;`
- `ALTER table table_name ADD attribute_name type(domain);`
- `Update table_name set attribute='value' WHERE attribute_PK='target-value';`

ENTITY RELATIONSHIP DIAGRAM



RELATIONAL SCHEMA

- ❑ **hotel_branch** (h_id, h_name, h_address, staff_id)
- ❑ **staff** (s_id, s_name, s_address, s_role)
- ❑ **room_booking** (R_id, R_no, check_in_date, check_out_date, weekend_pricing, holiday_pricing, early_bird_offers, s_id)
- ❑ **customer** (c_id, c_name, c_address, r_id)
- ❑ **loyalty_points** (points_id, upgrade_points, service_points, cus_id)
- ❑ **feedback** (f_id, f_type, comment, customer_id)
- ❑ **pre_order** (order_id, meal, taxi_service, cust_id)
- ❑ **task** (t_id, type, s_id)

CREATE DATABASE & HOTEL_BRANCH TABLE

```
MySQL 8.0 Command Line Client
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affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> create database hotel_chain;
Query OK, 1 row affected (0.02 sec)

mysql> show databases;
+-----+
| Database |
+-----+
| college |
| hotel_chain |
| information_schema |
| mysql |
| nimraashraf |
| performance_schema |
| sys |
+-----+
7 rows in set (0.04 sec)

mysql> use hotel_chain;
Database changed
mysql> create table hotel_branch(h_id INT(5) PRIMARY KEY, h_name varchar(20), h_address varchar(20));
Query OK, 0 rows affected, 1 warning (0.05 sec)

mysql> DESCRIBE hotel_branch;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| h_id | int | NO | PRI | NULL | |
| h_name | varchar(20) | YES | | NULL | |
| h_address | varchar(20) | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.02 sec)

mysql> select * from hotel_branch;
Empty set (0.01 sec)
```

Activate Windows
Go to Settings to activate Windows.

Desktop » ^ [Battery] [Wi-Fi] [Signal] [Volume] [Network] [ENG] 11:09 AM 4/30/2025

INSERTING VALUES, 3 NF OF HOTEL_BRANCH & CREATE STAFF TABLE

MySQL 8.0 Command Line Client - Unicode

```
| h_address | varchar(30) | YES | | NULL | | |
+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

```
mysql> select * from Hotel_branch;
```

```
+-----+-----+-----+
| H_id | h_name | h_address |
+-----+-----+-----+
| 1001 | unique | lahore    |
| 1002 | five_star | Multan    |
| 1003 | super | sheikhpura |
+-----+-----+-----+
3 rows in set (0.00 sec)
```

```
mysql> select h_name , h_address from Hotel_branch;
```

```
+-----+-----+
| h_name | h_address |
+-----+-----+
| unique | lahore    |
| five_star | Multan    |
| super | sheikhpura |
+-----+-----+
3 rows in set (0.00 sec)
```

```
mysql> create table staff(s_id INT(5) PRIMARY KEY, s_name varchar(20),s_address varchar(20),s_role varchar(19),R_id INT(5));
Query OK, 0 rows affected, 2 warnings (0.04 sec)
```

```
mysql> DESCRIBE staff;
```

```
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| s_id | int | NO | PRI | NULL | |
| s_name | varchar(20) | YES | | NULL | |
| s_address | varchar(20) | YES | | NULL | |
| s_role | varchar(19) | YES | | NULL | |
| R_id | int | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)
```

```
mysql> INSERT INTO staff values('1','haram','multan','manager','10'),('2','ahmad','sheikhpura','sweeper','20'),('3','sohail','lahore','receptionist','30');
```



Type here to search



40°C Haze



6:41 AM
4/29/2025



INSERTING VALUES AND MAKE 3RD NORMAL FORM OF STAFF

MySQL 8.0 Command Line Client - Unicode

| s_role | varchar(19) | YES | | NULL | | |
|--------|-------------|-----|--|------|--|--|
| R_id | int | YES | | NULL | | |

5 rows in set (0.00 sec)

```
mysql> INSERT INTO staff values('1','haram','multan','manager','10'),('2','ahmad','sheikhpura','sweeper','20'),('3','sohail','lahore','receptionist','30');
```

Query OK, 3 rows affected (0.02 sec)

Records: 3 Duplicates: 0 Warnings: 0

```
mysql> select * from staff;
```

| s_id | s_name | s_address | s_role | R_id |
|------|--------|------------|--------------|------|
| 1 | haram | multan | manager | 10 |
| 2 | ahmad | sheikhpura | sweeper | 20 |
| 3 | sohail | lahore | receptionist | 30 |

3 rows in set (0.00 sec)

```
mysql> select s_name, s_address, s
```

-> -^C

```
mysql> select s_name,s_address,s_role from staff;
```

| s_name | s_address | s_role |
|--------|------------|--------------|
| haram | multan | manager |
| ahmad | sheikhpura | sweeper |
| sohail | lahore | receptionist |

3 rows in set (0.00 sec)

ADD S_ID COLUMN IN HOTEL BRANCH TABLE & CHANGE ITS NAME (FROM S_ID TO STAFF_ID)

MySQL 8.0 Command Line Client - Unicode

+-----+-----+-----+
3 rows in set (0.00 sec)

```
mysql> ALTER table hotel_branch ADD s_id INT(5);  
Query OK, 0 rows affected, 1 warning (0.03 sec)  
Records: 0 Duplicates: 0 Warnings: 1
```

```
mysql> DESCRIBE Hotel_branch;
```

| Field | Type | Null | Key | Default | Extra |
|-----------|-------------|------|-----|---------|-------|
| H_id | int | NO | PRI | NULL | |
| h_name | varchar(25) | YES | | NULL | |
| h_address | varchar(30) | YES | | NULL | |
| s_id | int | YES | | NULL | |

+-----+-----+-----+
4 rows in set (0.00 sec)

```
mysql> ALTER table Hotel_branch RENAME COLUMN s_id to staff_id;  
Query OK, 0 rows affected (0.03 sec)  
Records: 0 Duplicates: 0 Warnings: 0
```

```
mysql> DESCRIBE Hotel_branch;
```

| Field | Type | Null | Key | Default | Extra |
|-----------|-------------|------|-----|---------|-------|
| H_id | int | NO | PRI | NULL | |
| h_name | varchar(25) | YES | | NULL | |
| h_address | varchar(30) | YES | | NULL | |
| staff_id | int | YES | | NULL | |

+-----+-----+-----+
4 rows in set (0.00 sec)

MAKE STAFF_ID FOREIGN KEY AND INSERT ITS VALUES

MySQL 8.0 Command Line Client - Unicode

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near '-id)' at line 1

mysql> ALTER table Hotel_branch ADD FOREIGN KEY (staff_id) REFERENCES staff (s_id);

Query OK, 3 rows affected (0.14 sec)

Records: 3 Duplicates: 0 Warnings: 0

mysql> DESCRIBE Hotel_branch;

| Field | Type | Null | Key | Default | Extra |
|-----------|-------------|------|-----|---------|-------|
| H_id | int | NO | PRI | NULL | |
| h_name | varchar(25) | YES | | NULL | |
| h_address | varchar(30) | YES | | NULL | |
| staff_id | int | YES | MUL | NULL | |

4 rows in set (0.00 sec)

mysql> Update Hotel_branch set staff_id='1' where H_id='1001';

Query OK, 1 row affected (0.02 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> Update Hotel_branch set staff_id='2' where H_id='1002';

Query OK, 1 row affected (0.01 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> Update Hotel_branch set staff_id='3' where H_id='1003';

Query OK, 1 row affected (0.01 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> select * from Hotel_branch;

| H_id | h_name | h_address | staff_id |
|------|-----------|------------|----------|
| 1001 | unique | lahore | 1 |
| 1002 | five_star | Multan | 2 |
| 1003 | super | sheikhpura | 3 |

3 rows in set (0.00 sec)

MAKE ROOM BOOKING TABLE AND MODIFY CHECK IN AND CHECK OUT DATES

MySQL 8.0 Command Line Client - Unicode

3 rows in set (0.00 sec)

```
mysql> create table Room_booking(room_id INT(5) PRIMARY KEY, r_no INT(6), check_in_date INT(20), check_out_date INT(20), weekend_pricing INT(20), hoilday_pricing INT(19), early_bird_offers INT(25));
Query OK, 0 rows affected, 7 warnings (0.04 sec)
```

```
mysql> DESCRIBE Room_booking;
```

| Field | Type | Null | Key | Default | Extra |
|-------------------|------|------|-----|---------|-------|
| room_id | int | NO | PRI | NULL | |
| r_no | int | YES | | NULL | |
| check_in_date | int | YES | | NULL | |
| check_out_date | int | YES | | NULL | |
| weekend_pricing | int | YES | | NULL | |
| hoilday_pricing | int | YES | | NULL | |
| early_bird_offers | int | YES | | NULL | |

7 rows in set (0.00 sec)

```
mysql> ALTER TABLE Room_booking
-> MODIFY COLUMN check_in_date DATE;
```

Query OK, 0 rows affected (0.13 sec)

Records: 0 Duplicates: 0 Warnings: 0

```
mysql> ALTER table Room_booking MODIFY COLUMN check_in_date DATE;
```

Query OK, 0 rows affected (0.02 sec)

Records: 0 Duplicates: 0 Warnings: 0

```
mysql> ALTER table Room_booking MODIFY COLUMN check_out_date DATE;
```

Query OK, 0 rows affected (0.08 sec)

Records: 0 Duplicates: 0 Warnings: 0



Type here to search



35°C Haze



7:57 AM
4/29/2025



DESCRIBE ROOM BOOKING, MODIFY EARLY BIRD OFFERS & INSERTING VALUES

MySQL 8.0 Command Line Client - Unicode

mysql> DESCRIBE Room_booking;

| Field | Type | Null | Key | Default | Extra |
|-------------------|------|------|-----|---------|-------|
| room_id | int | NO | PRI | NULL | |
| r_no | int | YES | | NULL | |
| check_in_date | date | YES | | NULL | |
| check_out_date | date | YES | | NULL | |
| weekend_pricing | int | YES | | NULL | |
| hoilday_pricing | int | YES | | NULL | |
| early_bird_offers | int | YES | | NULL | |

7 rows in set (0.00 sec)

mysql> INSERT INTO Room_booking values('10','202','2025-01-05','2025-01-25','8000','9000','40%');

ERROR 1265 (01000): Data truncated for column 'early_bird_offers' at row 1

mysql> ALTER table Room_booking MODIFY COLUMN early_bird_offers varchar(29);

Query OK, 0 rows affected (0.08 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> INSERT INTO Room_booking values('10','202','2025-01-05','2025-01-25','8000','9000','40%');

Query OK, 1 row affected (0.01 sec)

mysql> select * from Room_booking;

| room_id | r_no | check_in_date | check_out_date | weekend_pricing | hoilday_pricing | early_bird_offers |
|---------|------|---------------|----------------|-----------------|-----------------|-------------------|
| 10 | 202 | 2025-01-05 | 2025-01-25 | 8000 | 9000 | 40% |

1 row in set (0.00 sec)

mysql> INSERT INTO Room_booking values('20','504','2025-02-4','2025-02-8','7000','8000','30%');

Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO Room_booking values('30','301','2025-07-4','2025-07-8','8000','12000','30%');

Query OK, 1 row affected (0.01 sec)

mysql> select * from Room_booking;

| room_id | r_no | check_in_date | check_out_date | weekend_pricing | hoilday_pricing | early_bird_offers |
|---------|------|---------------|----------------|-----------------|-----------------|-------------------|
| 10 | 202 | 2025-01-05 | 2025-01-25 | 8000 | 9000 | 40% |
| 20 | 504 | 2025-02-4 | 2025-02-8 | 7000 | 8000 | 30% |
| 30 | 301 | 2025-07-4 | 2025-07-8 | 8000 | 12000 | 30% |



Type here to search



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8:00 AM
4/29/2025



```
mysql> INSERT INTO Room_booking values('10','202','2025-01-05','2025-01-25','8000','9000','40%');
```

```
ERROR 1265 (01000): Data truncated for column 'early_bird_offers' at row 1
```

```
mysql> ALTER table Room_booking MODIFY COLUMN early_bird_offers varchar(29);
```

```
Query OK, 0 rows affected (0.08 sec)
```

```
Records: 0 Duplicates: 0 Warnings: 0
```

```
mysql> INSERT INTO Room_booking values('10','202','2025-01-05','2025-01-25','8000','9000','40%');
```

```
Query OK, 1 row affected (0.01 sec)
```

```
mysql> select * from Room_booking;
```

| room_id | r_no | check_in_date | check_out_date | weekend_pricing | hoilday_pricing | early_bird_offers |
|---------|------|---------------|----------------|-----------------|-----------------|-------------------|
| 10 | 202 | 2025-01-05 | 2025-01-25 | 8000 | 9000 | 40% |

```
1 row in set (0.00 sec)
```

```
mysql> INSERT INTO Room_booking values('20','504','2025-02-4','2025-02-8','7000','8000','30%');
```

```
Query OK, 1 row affected (0.01 sec)
```

```
mysql> INSERT INTO Room_booking values('30','301','2025-07-4','2025-07-8','8000','12000','30%');
```

```
Query OK, 1 row affected (0.01 sec)
```

```
mysql> select * from Room_booking;
```

| room_id | r_no | check_in_date | check_out_date | weekend_pricing | hoilday_pricing | early_bird_offers |
|---------|------|---------------|----------------|-----------------|-----------------|-------------------|
| 10 | 202 | 2025-01-05 | 2025-01-25 | 8000 | 9000 | 40% |
| 20 | 504 | 2025-02-04 | 2025-02-08 | 7000 | 8000 | 30% |
| 30 | 301 | 2025-07-04 | 2025-07-08 | 8000 | 12000 | 30% |

```
3 rows in set (0.00 sec)
```

```
mysql> _
```



Type here to search



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8:02 AM

4/29/2025

MADE STAFF_ID FOREIGN KEY IN ROOM_BOOKING

MySQL 8.0 Command Line Client - Unicode

+-----+-----+-----+-----+-----+
8 rows in set (0.12 sec)

```
mysql> ALTER table room_booking ADD FOREIGN KEY (STAFF_ID) REFERENCES staff(s_id);  
Query OK, 3 rows affected (0.12 sec)  
Records: 3 Duplicates: 0 Warnings: 0
```

```
mysql> DESCRIBE room_booking;
```

| Field | Type | Null | Key | Default | Extra |
|-------------------|-------------|------|-----|---------|-------|
| room_id | int | NO | PRI | NULL | |
| r_no | int | YES | | NULL | |
| check_in_date | date | YES | | NULL | |
| check_out_date | date | YES | | NULL | |
| weekend_pricing | int | YES | | NULL | |
| hoilday_pricing | int | YES | | NULL | |
| early_bird_offers | varchar(29) | YES | | NULL | |
| STAFF_ID | int | YES | MUL | NULL | |

+-----+-----+-----+-----+-----+
8 rows in set (0.00 sec)

```
mysql> select * from room_booking;
```

| room_id | r_no | check_in_date | check_out_date | weekend_pricing | hoilday_pricing | early_bird_offers | STAFF_ID |
|---------|------|---------------|----------------|-----------------|-----------------|-------------------|----------|
| 10 | 202 | 2025-01-05 | 2025-01-25 | 8000 | 9000 | 40% | NULL |
| 20 | 504 | 2025-02-04 | 2025-02-08 | 7000 | 8000 | 30% | NULL |
| 30 | 301 | 2025-07-04 | 2025-07-08 | 8000 | 12000 | 30% | NULL |

+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)

ADD VALUES IN FOREIGN KEY

MySQL 8.0 Command Line Client - Unicode

3 rows in set (0.00 sec)

```
mysql> Update room_booking set STAFF_ID='1' where room_id='10';  
Query OK, 1 row affected (0.01 sec)  
Rows matched: 1  Changed: 1  Warnings: 0
```

```
mysql> Update room_booking set STAFF_ID='2' where room_id='20';  
Query OK, 1 row affected (0.01 sec)  
Rows matched: 1  Changed: 1  Warnings: 0
```

```
mysql> Update room_booking set STAFF_ID='3' where room_id='30';  
Query OK, 1 row affected (0.01 sec)  
Rows matched: 1  Changed: 1  Warnings: 0
```

```
mysql> select * from room_booking;
```

| room_id | r_no | check_in_date | check_out_date | weekend_pricing | hoilday_pricing | early_bird_offers | STAFF_ID |
|---------|------|---------------|----------------|-----------------|-----------------|-------------------|----------|
| 10 | 202 | 2025-01-05 | 2025-01-25 | 8000 | 9000 | 40% | 1 |
| 20 | 504 | 2025-02-04 | 2025-02-08 | 7000 | 8000 | 30% | 2 |
| 30 | 301 | 2025-07-04 | 2025-07-08 | 8000 | 12000 | 30% | 3 |

3 rows in set (0.00 sec)

```
mysql> _
```

3 NF OF ROOM BOOKING AND MAKE ROOM_ID FOREIGN KEY IN STAFF TABLE

MySQL 8.0 Command Line Client - Unicode

```
| 30 | 301 | 2025-07-04 | 2025-07-08 | 8000 | 12000 | 30% |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

```
mysql> select r_no,weekend_pricing,holiday_pricing,early_bird_offers from Room_booking;
```

ERROR 1054 (42S22): Unknown column 'holiday_pricing' in 'field list'

```
mysql> select r_no,weekend_pricing,hoilday_pricing,early_bird_offers from Room_booking;
```

```
+-----+-----+-----+-----+
| r_no | weekend_pricing | hoilday_pricing | early_bird_offers |
+-----+-----+-----+-----+
| 202 | 8000 | 9000 | 40% |
| 504 | 7000 | 8000 | 30% |
| 301 | 8000 | 12000 | 30% |
+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

```
mysql> ALTER table staff ADD FOREIGN KEY (R_id) REFERENCES Room_booking (room_id);
```

Query OK, 3 rows affected (0.14 sec)

Records: 3 Duplicates: 0 Warnings: 0

```
mysql> DESCRIBE staff;
```

```
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| s_id | int | NO | PRI | NULL | |
| s_name | varchar(20) | YES | | NULL | |
| s_address | varchar(20) | YES | | NULL | |
| s_role | varchar(19) | YES | | NULL | |
| R_id | int | YES | MUL | NULL | |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)
```

```
mysql>
```


CREATE CUSTOMER TABLE AND ADD MISSING C_ADDRESS COLUMN IN IT

MySQL 8.0 Command Line Client - Unicode

+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)

```
mysql> create table customer(c_id INT(9) primary key,c_name varchar(15), r_id INT(5));  
Query OK, 0 rows affected, 2 warnings (0.05 sec)
```

```
mysql> DESCRIBE customer;
```

| Field | Type | Null | Key | Default | Extra |
|--------|-------------|------|-----|---------|-------|
| c_id | int | NO | PRI | NULL | |
| c_name | varchar(15) | YES | | NULL | |
| r_id | int | YES | | NULL | |

+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)

```
mysql> ALTER table customer ADD c_address varchar(30);  
Query OK, 0 rows affected (0.08 sec)  
Records: 0 Duplicates: 0 Warnings: 0
```

```
mysql> DESCRIBE customer;
```

| Field | Type | Null | Key | Default | Extra |
|-----------|-------------|------|-----|---------|-------|
| c_id | int | NO | PRI | NULL | |
| c_name | varchar(15) | YES | | NULL | |
| r_id | int | YES | | NULL | |
| c_address | varchar(30) | YES | | NULL | |

+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)

INSERTING VALUES AND MAKE R_ID FOREIGN KEY IN CUSTOMER TABLE

MySQL 8.0 Command Line Client - Unicode

| c_address | varchar(30) | YES | | NULL | | |
|-----------|-------------|-----|--|------|--|--|
| | | | | | | |

4 rows in set (0.00 sec)

```
mysql> INSERT INTO customer values('100','NOOR', '10', 'Farooqabad');
Query OK, 1 row affected (0.01 sec)
```

```
mysql> INSERT INTO customer values('200','NIMRA', '20', 'sheikhpura'),('300','shanzey', '30', 'sheikhpura');
Query OK, 2 rows affected (0.01 sec)
Records: 2 Duplicates: 0 Warnings: 0
```

```
mysql> select * from student;
ERROR 1146 (42S02): Table 'hotel_chain.student' doesn't exist
mysql> select * from customer;
```

| c_id | c_name | r_id | c_address |
|------|---------|------|------------|
| 100 | NOOR | 10 | Farooqabad |
| 200 | NIMRA | 20 | Sheikhpura |
| 300 | shanzey | 30 | Sheikhpura |

3 rows in set (0.00 sec)

```
mysql> ALTER table customer ADD FOREIGN KEY (r_id) REFERENCES Room_booking (room_id);
Query OK, 3 rows affected (0.22 sec)
Records: 3 Duplicates: 0 Warnings: 0
```

```
mysql> describe customer;
```

| Field | Type | Null | Key | Default | Extra |
|-----------|-------------|------|-----|---------|-------|
| c_id | int | NO | PRI | NULL | |
| c_name | varchar(15) | YES | | NULL | |
| r_id | int | YES | MUL | NULL | |
| c_address | varchar(30) | YES | | NULL | |

4 rows in set (0.00 sec)

CREATE LOYALTY POINTS TABLE, MAKE CUS_ID FOREIGN KEY IN IT

MySQL 8.0 Command Line Client - Unicode

4 rows in set (0.00 sec)

```
mysql> create table loyalty_points(point_id INT(10) PRIMARY KEY, service_points INT(8), upgrade_points INT(6), cus_id INT(9));
Query OK, 0 rows affected, 4 warnings (0.04 sec)
```

```
mysql> DESCRIBE loyalty_points;
```

| Field | Type | Null | Key | Default | Extra |
|----------------|------|------|-----|---------|-------|
| point_id | int | NO | PRI | NULL | |
| service_points | int | YES | | NULL | |
| upgrade_points | int | YES | | NULL | |
| cus_id | int | YES | | NULL | |

4 rows in set (0.00 sec)

```
mysql> ALTER table loyalty_points ADD FOREIGN KEY (cus_id) REFERENCES customer (c_id);
Query OK, 0 rows affected (0.14 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

```
mysql> describe loyalty_points;
```

| Field | Type | Null | Key | Default | Extra |
|----------------|------|------|-----|---------|-------|
| point_id | int | NO | PRI | NULL | |
| service_points | int | YES | | NULL | |
| upgrade_points | int | YES | | NULL | |
| cus_id | int | YES | MUL | NULL | |

4 rows in set (0.00 sec)

INSERTING VALUES AND DESCRIBE LOYALTY_POINTS TABLE

```
MySQL 8.0 Command Line Client - Unicode
+-----+-----+-----+-----+
4 rows in set (0.00 sec)

mysql> INSERT INTO loyaty_points values('104','300','50','100');
ERROR 1146 (42S02): Table 'hotel_chain.loyaty_points' doesn't exist
mysql> INSERT INTO loyalty_points values('104','300','50','100');
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO loyalty_points values('208','500','100','200'),('310','400','60','300');
Query OK, 2 rows affected (0.01 sec)
Records: 2 Duplicates: 0 Warnings: 0

mysql> select * from loyalty_points;
+-----+-----+-----+-----+
| point_id | service_points | upgrade_points | cus_id |
+-----+-----+-----+-----+
|      104 |           300 |             50 |     100 |
|      208 |           500 |            100 |     200 |
|      310 |           400 |             60 |     300 |
+-----+-----+-----+-----+
3 rows in set (0.00 sec)

mysql> _
```


CREATE FEEDBACK TABLE AND MAKE CUSTOMER_ID FOREIGN KEY IN IT

MySQL 8.0 Command Line Client - Unicode

3 rows in set (0.00 sec)

```
mysql> create table feedback(fb_id INT(15) PRIMARY KEY, fb_type varchar(20), comment varchar(30), customer_id INT(10));
Query OK, 0 rows affected, 2 warnings (0.04 sec)
```

```
mysql> DESCRIBE feedback;
```

| Field | Type | Null | Key | Default | Extra |
|-------------|-------------|------|-----|---------|-------|
| fb_id | int | NO | PRI | NULL | |
| fb_type | varchar(20) | YES | | NULL | |
| comment | varchar(30) | YES | | NULL | |
| customer_id | int | YES | | NULL | |

4 rows in set (0.00 sec)

```
mysql> ALTER table feedback ADD FOREIGN KEY (customer_id) REFERENCES customer (c_id);
Query OK, 0 rows affected (0.14 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

```
mysql> describe feedback;
```

| Field | Type | Null | Key | Default | Extra |
|-------------|-------------|------|-----|---------|-------|
| fb_id | int | NO | PRI | NULL | |
| fb_type | varchar(20) | YES | | NULL | |
| comment | varchar(30) | YES | | NULL | |
| customer_id | int | YES | MUL | NULL | |

4 rows in set (0.00 sec)

INSERTING VALUES AND CREATE PRE_ORDER TABLE WITH A CUST_ID COLUMN

MySQL 8.0 Command Line Client - Unicode

```
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)
```

```
mysql> INSERT INTO feedback values('203','compliment','great food','100');
Query OK, 1 row affected (0.02 sec)
```

```
mysql> INSERT INTO feedback values('202','complaint','late services','200');
Query OK, 1 row affected (0.01 sec)
```

```
mysql> INSERT INTO feedback values('300','compliment','good services','300');
Query OK, 1 row affected (0.01 sec)
```

```
mysql> select * from feedback;
```

| fb_id | fb_type | comment | customer_id |
|-------|------------|---------------|-------------|
| 202 | complaint | late services | 200 |
| 203 | compliment | great food | 100 |
| 300 | compliment | good services | 300 |

```
+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

```
mysql> create table PreOrder(order_id INT(30) PRIMARY KEY,meal varchar(40),taxi_services varchar(10),cust_id INT(10));
Query OK, 0 rows affected, 2 warnings (0.04 sec)
```

```
mysql> DESCRIBE PreOrder;
```

| Field | Type | Null | Key | Default | Extra |
|---------------|-------------|------|-----|---------|-------|
| order_id | int | NO | PRI | NULL | |
| meal | varchar(40) | YES | | NULL | |
| taxi_services | varchar(10) | YES | | NULL | |
| cust_id | int | YES | | NULL | |

```
+-----+-----+-----+-----+
4 rows in set (0.00 sec)
```

MADE CUS_ID FOREIGN KEY FOR PRE_ORDER TABLE AND INSERT VALUES

```
mysql> ALTER table PreOrder ADD FOREIGN KEY (cust_id) REFERENCES customer (c_id);
Query OK, 0 rows affected (0.15 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

```
mysql> describe PreOrder;
```

| Field | Type | Null | Key | Default | Extra |
|---------------|-------------|------|-----|---------|-------|
| order_id | int | NO | PRI | NULL | |
| meal | varchar(40) | YES | | NULL | |
| taxi_services | varchar(10) | YES | | NULL | |
| cust_id | int | YES | MUL | NULL | |

```
4 rows in set (0.00 sec)
```

```
mysql> INSERT INTO PreOrder values('110','breakfast','yes','100');
Query OK, 1 row affected (0.01 sec)
```

```
mysql> INSERT INTO PreOrder values('220','Dinner','No','200');
Query OK, 1 row affected (0.01 sec)
```

```
mysql> INSERT INTO PreOrder values('330','lunch','yes','300');
Query OK, 1 row affected (0.01 sec)
```

```
mysql> select * from PreOrder;
```

| order_id | meal | taxi_services | cust_id |
|----------|-----------|---------------|---------|
| 110 | breakfast | yes | 100 |
| 220 | Dinner | No | 200 |
| 330 | lunch | yes | 300 |

```
3 rows in set (0.00 sec)
```

CREATE TASK TABLE, ADD STAFF_ID FOREIGN KEY AND DESCRIBE IT

```
mysql> create table task(t_id INT(5) PRIMARY KEY, type varchar(20), st_id INT(5));
Query OK, 0 rows affected, 2 warnings (0.05 sec)
```

```
mysql> DESCRIBE tsk;
ERROR 1146 (42S02): Table 'hotel_chain.tsk' doesn't exist
mysql> DESCRIBE task;
```

```
+-----+-----+-----+-----+-----+
| Field | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+
| t_id  | int       | NO   | PRI | NULL    |       |
| type  | varchar(20) | YES  |     | NULL    |       |
| st_id | int       | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

```
mysql> ALTER table task ADD FOREIGN KEY (st_id) REFERENCES staff(s_id);
Query OK, 0 rows affected (0.10 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

```
mysql> DESCRIBE task;
+-----+-----+-----+-----+-----+
| Field | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+
| t_id  | int       | NO   | PRI | NULL    |       |
| type  | varchar(20) | YES  |     | NULL    |       |
| st_id | int       | YES  | MUL | NULL    |       |
+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```


INSERT VALUES IN TASK TABLE AND SHOW IT

```
mysql> INSERT INTO task values('100','cleaning','1');
```

```
Query OK, 1 row affected (0.01 sec)
```

```
mysql> INSERT INTO task values('201','maintenance','2');
```

```
Query OK, 1 row affected (0.01 sec)
```

```
mysql> INSERT INTO task values('405','guard','3');
```

```
Query OK, 1 row affected (0.01 sec)
```

```
mysql> select * from task;
```

| t_id | type | st_id |
|------|-------------|-------|
| 100 | cleaning | 1 |
| 201 | maintenance | 2 |
| 405 | guard | 3 |

PROBLEMS IN 2ND AND 3RD NORMAL FORMS

2ND NORMAL FORM:

2nd normal form of a table is made when there is partial dependency, means when some of the attributes of a table depend on one attribute and some other depends on any other attribute. But in the above normalization there is no table having partial dependency. So, 2nd normal form is not possible.

3RD NORMAL FORM:

3rd normal form of a table is created when a non-key attribute is easily determined by any other non-key attribute called transition dependency. In above normalization case, there are some table having 3NF but mostly tables don't have transition dependency.

THANKS

