# DENORMALIZATION RULES APPLIED ON NORMALIZATION TABLES

GROUP 16

## **DESCRIPTION:**

- 1. ADDING REDUNDANCY
- 2. MULTIVALUED ATTRIBUTE
- 3. STORING DERIVABLE VALUE
- 4. PRE-JOINING TABLES
- 5. JOIN DETAIL IN MASTER
- 6. HARD CODED VALUES

#### **ADDING REDUNDANCY**

Two records of a column have the same value or the data is repeated in multiple columns.

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

| H_id | h_name | h_address | staff_id |
| 1001 | unique | lahore | 1 |
| 1002 | five_star | Multan | 2 |
| 1003 | five_star | Sheikhpura | 3 |
| 3 rows in set (0.00 sec)

mysql> _

| 1003 | mysql> _

| 1004 | mysql> _

| 1005 | mysql> _

| 1005 | mysql> _

| 1006 | mysql> _

| 1007 | mysql> _

| 1008 | mysql> _

| 1009 | mysql> _
```

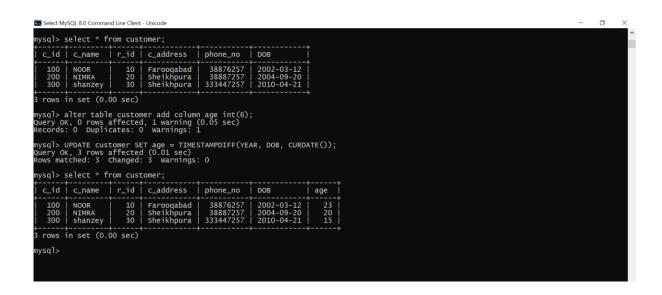
#### **MULTIVALUED ATTRIBUTE**

The attribute having more than one values in a record is known as multivalued attribute.

```
3 rows in set (0.00 sec)
mysql> update hotel_branch set h_address='karachi,lahore' where h_id='1001';
Query OK, 1 row affected (0.02 sec)
Rows matched: 1 changed: 1 warnings: 0
mysql> select * from hotel_branch;
| H_id | h_name | h_address | staff_id |
| 1001 | unique | karachi,lahore | 1 |
| 1002 | five_star | Multan | 2 |
| 1003 | five_star | Sheikhpura | 3 |
3 rows in set (0.00 sec)
mysql>
```

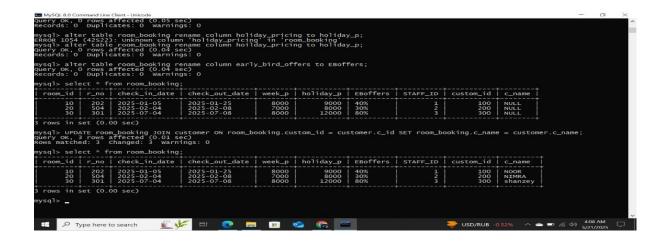
#### STORING DERIVABLE VALUE

Deriving values of one attribute column from another.



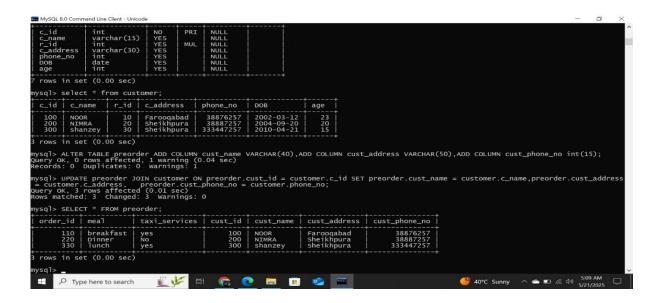
# PRE-JOINING TABLE CUSTOMER & ROOM\_BOOKING

A "pre-joining table" in SQL refers to the practice of combining data from multiple tables into a single.



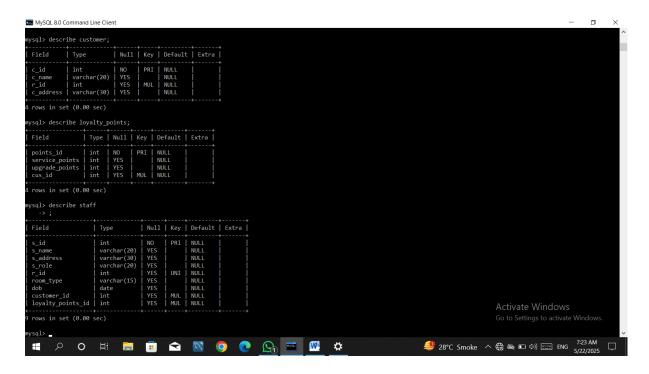
### JOIN DETAIL WITH MASTER

Adding the necessary details of child table in parent table.



#### SHORT CIRCUIT KEYS

Adding foreign keys of 1st two tables in the 3rd table so that the 3rd table can access the data of other two tables easily.



#### **HARD CODED VALUES**

Adding a fixed value directly in the the query

