GeoSpecial

Introduction

This project used for Geographical Location Tagging. This project helps to find different types of Infrastructure like Roads, Buildings, Railway Stations and Metro Stations etc. present across the Metro Cities such as Mumbai, Pune, Thane & NaviMumbai.

ER Diagram

STRUCTURE OF TABLE

Employee

This table used to describe Employee details as well as City details, it contains details of Employee & City such as Employee ID, Employee name, City ID, City name etc.

```
MariaDB [loc_tag_project]> desc Employee;
+--------------+-------------+------+-----+---------+-------+
| Field        | Type        | Null | Key | Default | Extra |
+--------------+-------------+------+-----+---------+-------+
| City_id      | varchar(20) | NO   | PRI | NULL    |       |
| City_Name    | varchar(20) | NO   |     | NULL    |       |
| Emp_id       | varchar(20) | NO   |     | NULL    |       |
| Emp_name     | varchar(20) | NO   |     | NULL    |       |
| Feild        | varchar(20) | NO   |     | NULL    |       |
| Verification | varchar(30) | NO   |     | NULL    |       |
| Pincode      | int(11)     | NO   |     | NULL    |       |
+--------------+-------------+------+-----+---------+-------+
7 rows in set (0.061 sec)
```

Road

This table used to describe Road details, it contains details of Road such as Road No, Road Name, Road Type etc.

```
MariaDB [loc_tag_project]> desc Road;
+---------------+-------------+------+-----+---------+-------+
| Field         | Type        | Null | Key | Default | Extra |
+---------------+-------------+------+-----+---------+-------+
| Road_no       | varchar(20) | NO   | PRI | NULL    |       |
| Road_name     | varchar(20) | NO   |     | NULL    |       |
| Road_type     | varchar(20) | NO   |     | NULL    |       |
| City_id       | varchar(20) | YES  | MUL | NULL    |       |
| Verification  | varchar(20) | NO   |     | NULL    |       |
| Latest_update | varchar(30) | NO   |     | NULL    |       |
+---------------+-------------+------+-----+---------+-------+
6 rows in set (0.039 sec)
```
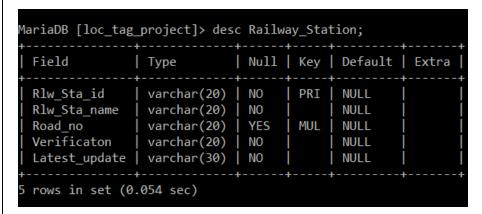
Building

This table used to describe Building details, it contains details of Building such as Building no, Building name, Building type etc.

```
MariaDB [loc_tag_project]> desc Building;
+---------------+-------------+------+-----+---------+-------+
| Field         | Type        | Null | Key | Default | Extra |
+---------------+-------------+------+-----+---------+-------+
| Building_no   | int(11)     | NO   | PRI | NULL    |       |
| Building_name | varchar(50) | NO   |     | NULL    |       |
| Building_type | varchar(20) | NO   |     | NULL    |       |
| Road_no       | varchar(20) | YES  | MUL | NULL    |       |
| Verificaton   | varchar(20) | NO   |     | NULL    |       |
| Latest_update | varchar(30) | NO   |     | NULL    |       |
+---------------+-------------+------+-----+---------+-------+
6 rows in set (0.012 sec)
```

Railway Station

This table used to describe Railway Station details, it contains details of Railway station such as Railway station ID, Railway station Name etc.

```
MariaDB [loc_tag_project]> desc Railway_Station;
+---------------+-------------+------+-----+---------+-------+
| Field         | Type        | Null | Key | Default | Extra |
+---------------+-------------+------+-----+---------+-------+
| Rlw_Sta_id    | varchar(20) | NO   | PRI | NULL    |       |
| Rlw_Sta_name  | varchar(20) | NO   |     | NULL    |       |
| Road_no       | varchar(20) | YES  | MUL | NULL    |       |
| Verificaton   | varchar(20) | NO   |     | NULL    |       |
| Latest_update | varchar(30) | NO   |     | NULL    |       |
+---------------+-------------+------+-----+---------+-------+
5 rows in set (0.054 sec)
```

Metro Station

This table used to describe Metro Station details, it contains details of Metro station such as Metro station ID, Metro station Name

```
MariaDB [loc_tag_project]> desc Metro_Station;
+----------------+-------------+------+-----+---------+-------+
| Field          | Type        | Null | Key | Default | Extra |
+----------------+-------------+------+-----+---------+-------+
| Metro_Sta_id   | varchar(20) | NO   | PRI | NULL    |       |
| Metro_Sta_name | varchar(20) | NO   |     | NULL    |       |
| Road_no        | varchar(20) | YES  | MUL | NULL    |       |
| Rlw_Sta_id     | varchar(20) | YES  | MUL | NULL    |       |
| Verificaton    | varchar(20) | NO   |     | NULL    |       |
| Latest_update  | varchar(30) | NO   |     | NULL    |       |
+----------------+-------------+------+-----+---------+-------+
6 rows in set (0.031 sec)
```

CONTENT OF TABLE

Employee

```
MariaDB [loc_tag_project]> select * from Employee;
+---------+-------------+--------+--------------------+----------+------------------+---------+
| City_id | City_Name   | Emp_id | Emp_name           | Feild    | Verification     | Pincode |
+---------+-------------+--------+--------------------+----------+------------------+---------+
| C1      | Navi Mumbai | E101   | Mahesh Mane        | metro    | VERIFY           |  410208 |
| C10     | Mumbai      | E110   | Priya shinde       | Railway  | VERIFY           |  400077 |
| C11     | Mumbai      | E111   | Reshma raut        | Road     | VERIFY           |  400104 |
| C12     | Mumbai      | E112   | Ratna sonawane     | Building | NOT YET VERIFYED |  400104 |
| C13     | Pune        | E113   | Ashwin tambe       | Road     | VERIFY           |  411021 |
| C14     | Mumbai      | E114   | Kali dinkar        | Building | VERIFY           |  400058 |
| C15     | Pune        | E115   | Damodara ghoorpade | Road     | VERIFY           |  411004 |
| C16     | Pune        | E116   | Dayarama suchin    | Railway  | VERIFY           |  411021 |
| C17     | Pune        | E117   | Deepali gupta      | Road     | VERIFY           |  411009 |
| C18     | Thane       | E118   | Dhananjay maji     | Building | VERIFY           |  400604 |
| C19     | Mumbai      | E119   | Dilip gunde        | Railway  | VERIFY           |  400058 |
| C2      | Thane       | E102   | Ruchita lokare     | Railway  | VERIFY           |  400604 |
| C20     | Thane       | E120   | Kapila kasagra     | Road     | VERIFY           |  400604 |
| C21     | Navi Mumbai | E121   | Raghu suri         | Building | NOT YET VERIFYED |  400614 |
| C22     | Thane       | E122   | Rohan shrihari     | Road     | VERIFY           |  421302 |
| C23     | Mumbai      | E123   | Ram pal            | metro    | VERIFY           |  400104 |
| C24     | Navi Mumbai | E124   | Savitri himanshu   | Railway  | VERIFY           |  400614 |
| C25     | Navi Mumbai | E125   | Padma yadav        | Road     | VERIFY           |  400614 |
| C26     | Thane       | E126   | Atul shriwastav    | Building | VERIFY           |  421302 |
| C27     | Navi Mumbai | E127   | Mohit joshi        | Building | VERIFY           |  410208 |
| C28     | Pune        | E128   | Lalit kelli        | Building | VERIFY           |  411021 |
| C29     | Navi Mumbai | E129   | Kashiram parab     | Road     | VERIFY           |  410208 |
| C3      | Mumbai      | E103   | Sakshi shelar      | Road     | VERIFY           |  400077 |
| C30     | Mumbai      | E130   | Pratham pandey     | Building | NOT YET VERIFYED |  400104 |
| C4      | Navi Mumbai | E104   | Raghav date        | Building | VERIFY           |  410208 |
| C5      | Thane       | E105   | Rohit dube         | metro    | VERIFY           |  400604 |
| C6      | Pune        | E106   | John fernandes     | Building | VERIFY           |  411009 |
| C7      | Pune        | E107   | Jyoti gupta        | metro    | VERIFY           |  411009 |
| C8      | Mumbai      | E108   | Ram chavan         | metro    | VERIFY           |  400058 |
| C9      | Mumbai      | E109   | Lata rathod        | Road     | VERIFY           |  400058 |
+---------+-------------+--------+--------------------+----------+------------------+---------+
30 rows in set (0.000 sec)
```

Employee

Road

```
MariaDB [loc_tag_project]> select * from Road;
```

Road_no	Road_name	Road_type	City_id	Verification	Latest_update
NH04	MUMBAI-DELHI	8 LANE ROAD	C20	VERIFY	Lane count upgrated
NH06	MUMBAI-VADODARA	4 LANE ROAD	C11	VERIFY	Lane count upgrated
NH07	MUMBAI-DELHI	8 LANE ROAD	C18	VERIFY	Lane count upgrated
NH31	MUMBAI-PUNE	4 LANE ROAD	C14	VERIFY	Lane count upgrated
NH52	MUMBAI-NAGPUR	6 LANE ROAD	C19	VERIFY	Lane count upgrated
RD03	Lal bahadur shashtri	Paved Shoulder	C3	VERIFY	Change in Road No
RD04	Matoshree Mehata Cho	Paved Shoulder	C10	VERIFY	Change in Road Name
RD05	NEHARU MARG	CONCRETE ROAD	C5	VERIFY	Change in Road Name
RD08	JAGATAP MARG	Paved Shoulder	C4	VERIFY	Change in Road Name
RD09	DURGAMATA ROAD	Paved Shoulder	C24	VERIFY	NA
RD10	ROAD NO 10	Paved Shoulder	C7	VERIFY	Change in Road Name
RD16	DIGHE ROAD	Paved Shoulder	C2	VERIFY	Change in Road No
RD18	THANE-BELAPUR	Paved Shoulder	C22	VERIFY	Change in Road Name
RD22	MAHATMA GANDHI ROAD	Paved Shoulder	C23	VERIFY	NA
RD24	DADABHAI NAOROJI ROA	Paved Shoulder	C21	NOT YET VERIFYED	Change in Road No
RD25	KUMTHEKAR ROAD	Paved Shoulder	C15	VERIFY	Change in Road No
RD27	JIJAMATA CHOWK	Paved Shoulder	C29	VERIFY	Lane count upgrated
RD29	AAMBEDKAR ROAD	CONCRETE ROAD	C28	VERIFY	NA
RD46	NEHARU ROAD	Paved Shoulder	C30	NOT YET VERIFYED	NA
RD50	Road_No 50	Paved Shoulder	C1	VERIFY	Change in Road No
RD52	PUNE DISRICT ROAD	2 LANE ROAD	C6	VERIFY	Change in Road No
SH02	MUMBAI-KARJAT ROAD	2 LANE ROAD	C9	VERIFY	Change in Road Name
SH05	THANE-SATARA	4 LANE ROAD	C25	VERIFY	Lane count upgrated
SH07	THANE-SATARA	4 LANE ROAD	C26	VERIFY	Lane count upgrated
SH11	PUNE -NASHIK HIGHWAY	4 LANE ROAD	C13	VERIFY	Lane count upgrated
SH12	VIRAR-BORIWALI	4 LANE ROAD	C12	NOT YET VERIFYED	Lane count upgrated
SH19	PIMPARi CHINCHWAD LI	4 LANE ROAD	C16	VERIFY	Change in Road No
SH21	THANE-SATARA	4 LANE ROAD	C27	VERIFY	Lane count upgrated
SH23	BAJIRAO ROAD	4 LANE ROAD	C17	VERIFY	Lane count upgrated
SH42	MUMBAI-RAIGAD ROAD	2 LANE ROAD	C8	VERIFY	Change in Road No

```
30 rows in set (0.000 sec)
```

Building

```
MariaDB [loc_tag_project]> select * from Building;
+-------------+---------------------------------------+----------------------+---------+-------------------+-------------------+
| Building_no | Building_name                         | Building_type        | Road_no | Verificaton       | Latest_update     |
+-------------+---------------------------------------+----------------------+---------+-------------------+-------------------+
|           2 | Waman Hari Pethe                      | Mercantile Building  | SH12    | NOT YET VERIFYED  | Renovation        |
|           3 | Sai Krupa                             | Residential Building | SH11    | VERIFY            | Renovation        |
|           4 | Bhumi Sadan                           | Residential Building | RD22    | VERIFY            | Renovation        |
|           5 | Mahape Railway Station                | Government Building  | RD50    | VERIFY            | Modifed           |
|           6 | Godavari Niwas                        | Residential Building | RD25    | VERIFY            | Modifed           |
|           7 | Shivtej Building                      | Residential Building | RD16    | VERIFY            | Modifed           |
|           8 | Jagdamba Niwas                        | Residential Building | RD29    | VERIFY            | Under Construction |
|           9 | luxmi Niwas                           | Residential Building | RD10    | VERIFY            | Modifed           |
|          10 | Nvoday Vidyalay                       | Educational Building | RD52    | VERIFY            | Under Construction |
|          11 | Bajaj Finance Bank pvt ltd            | Business Building    | SH42    | VERIFY            | Renovation        |
|          13 | Patakai Godown                        | Store House          | SH02    | VERIFY            | Renovation        |
|          15 | Swami Benglow                         | Residential Building | SH07    | VERIFY            | Modifed           |
|          16 | Ahilya Niwas                          | Residential Building | RD03    | VERIFY            | Under Construction |
|          17 | District School                       | Government Building  | NH07    | VERIFY            | Under Construction |
|          18 | Honda Showroom                        | Commertial Building  | NH31    | VERIFY            | Modifed           |
|          19 | Desoza International School            | Educational Building | NH04    | VERIFY            | Under Construction |
|          20 | Lanchika Jwellery  and design shop    | Commertial Building  | RD18    | VERIFY            | Renovation        |
|          21 | Sarswati Niwas                        | Residential Building | RD04    | VERIFY            | Under Construction |
|          22 | L&T TEXTILE                           | Business Building    | NH52    | VERIFY            | Renovation        |
|          23 | Savitri Bhavan                        | Residential Building | RD08    | VERIFY            | Renovation        |
|          24 | WIPRO                                 | Industrial Building  | NH06    | VERIFY            | Renovation        |
|          25 | TAJ Tower                             | Residential Building | RD24    | VERIFY            | Under Construction |
|          27 | Shriram Wood Shop                     | Commertial Building  | RD27    | VERIFY            | Under Construction |
|          29 | Lunch Home                            | Commertial Building  | SH23    | VERIFY            | Renovation        |
|          31 | Chiken Shop                           | Commertial Building  | RD09    | VERIFY            | Renovation        |
|          32 | Piramal Heritage                      | Residential Building | SH19    | VERIFY            | Modifed           |
|          33 | Zerox and Photocopy Center            | Commertial Building  | SH05    | VERIFY            | Modifed           |
|          35 | Mathakar Complex                      | Residential Building | SH21    | VERIFY            | Under Construction |
|          51 | Grampanchayat                         | Government Building  | RD05    | VERIFY            | Renovation        |
|          72 | Luxmi Snacks Corner                   | Commertial Building  | RD46    | NOT YET VERIFYED  | Modifed           |
+-------------+---------------------------------------+----------------------+---------+-------------------+-------------------+
30 rows in set (0.014 sec)
```

Railway Station

```
MariaDB [loc_tag_project]> select * from Railway_Station;
+-----------+------------------------+---------+------------------+--------------------+
| Rlw_Sta_id | Rlw_Sta_name          | Road_no | Verificaton      | Latest_update      |
+-----------+------------------------+---------+------------------+--------------------+
| R01       | Airoli                 | RD50    | VERIFY           | Name Change        |
| R010      | Bhandup                | SH19    | VERIFY           | Under construction |
| R011      | Nahur                  | SH23    | VERIFY           | Name Change        |
| R012      | Mulund                 | RD29    | VERIFY           | Under construction |
| R013      | Sant Tukaran Nagar R    | SH11    | VERIFY           | Under construction |
| R014      | Matunga Road           | NH31    | VERIFY           | Under construction |
| R015      | Phugewadi Railway St    | RD25    | VERIFY           | Under construction |
| R016      | Khadaki Railway Stat    | SH19    | VERIFY           | Under construction |
| R017      | Mandai Railway Stati    | SH23    | VERIFY           | Under construction |
| R018      | Mumbra                 | NH07    | VERIFY           | Under construction |
| R019      | Mahim                  | NH52    | VERIFY           | Name Change        |
| R02       | Thane Railway Statio    | RD16    | VERIFY           | Under construction |
| R020      | Kapurbavadi Railway     | NH04    | NOT YET VERIFYED | Under construction |
| R021      | Ghansoli               | RD24    | VERIFY           | Name Change        |
| R022      | R Mall Railway Stati    | RD18    | NOT YET VERIFYED | Under construction |
| R023      | BKC Railway Station     | RD22    | VERIFY           | Name Change        |
| R024      | Koparkhairne           | RD09    | VERIFY           | Under construction |
| R025      | Turbhe                 | SH05    | VERIFY           | Name Change        |
| R026      | Diwa                   | SH05    | VERIFY           | Under construction |
| R027      | Sanpada                | SH21    | VERIFY           | Name Change        |
| R028      | Shivaji Nagar          | RD29    | VERIFY           | Under construction |
| R029      | Vashi                  | RD27    | VERIFY           | Name Change        |
| R03       | Ghatkopar              | RD03    | VERIFY           | Name Change        |
| R030      | Khar Road              | RD46    | VERIFY           | Under construction |
| R04       | Rabale                 | RD08    | VERIFY           | Under construction |
| R05       | Kalawa                 | RD05    | VERIFY           | Name Change        |
| R06       | Pune Railway Station    | RD52    | VERIFY           | Renovation         |
| R07       | Pimpri-Chinchwad        | RD10    | VERIFY           | Renovation         |
| R08       | Vikroli                | SH11    | VERIFY           | Under construction |
| R09       | Kanjurmarga            | RD25    | VERIFY           | Name Change        |
+-----------+------------------------+---------+------------------+--------------------+
30 rows in set (0.009 sec)
```

Metro Station

```
MariaDB [loc_tag_project]> select * from Metro_Station;
+--------------+----------------------+---------+------------+------------------+--------------------+
| Metro_Sta_id | Metro_Sta_name       | Road_no | Rlw_Sta_id | Verificaton      | Latest_update      |
+--------------+----------------------+---------+------------+------------------+--------------------+
| MMPM16       | Puneri Mtero Station  | RD52    | R06        | VERIFY           | Modifed            |
| MMPM17       | Pimpri-Chinchwad Met  | RD10    | R07        | VERIFY           | Under Construction |
| MMPM23       | Sant Tukaran Nagar    | SH11    | R013       | VERIFY           | Under Construction |
| MMPM25       | Phugewadi             | RD25    | R015       | VERIFY           | Under Construction |
| MMPM26       | Khadaki               | SH19    | R016       | VERIFY           | Under Construction |
| MMPM27       | Mandai                | SH23    | R017       | VERIFY           | Under Construction |
| MMRDA11      | Airoli Metro Station  | RD50    | R01        | VERIFY           | Under Construction |
| MMRDA12      | Thane Metro Station   | RD16    | R02        | VERIFY           | Modifed            |
| MMRDA13      | Ghatkopar Metro Stat  | RD03    | R03        | VERIFY           | Modifed            |
| MMRDA14      | Rabale Metro Station  | RD08    | R04        | VERIFY           | Under Construction |
| MMRDA15      | Kalawa Metro Station  | RD05    | R05        | VERIFY           | Modifed            |
| MMRDA18      | Vikroli Metro Statio  | SH42    | R08        | VERIFY           | Modifed            |
| MMRDA19      | Kanjurmarg Metro Sta  | SH02    | R09        | VERIFY           | Modifed            |
| MMRDA20      | Bhandup Metro Statio  | RD04    | R010       | VERIFY           | Modifed            |
| MMRDA21      | Nahur Metro Station   | NH06    | R011       | VERIFY           | Modifed            |
| MMRDA22      | Mulund Metro Station  | SH12    | R012       | VERIFY           | Modifed            |
| MMRDA24      | Matunga Metro Statio  | NH31    | R014       | VERIFY           | Modifed            |
| MMRDA28      | Mubra Metro Station   | NH07    | R018       | VERIFY           | Under Construction |
| MMRDA29      | Mahim Metro Station   | NH52    | R019       | VERIFY           | Modifed            |
| MMRDA30      | Kapurbavdi            | NH04    | R020       | NOT YET VERIFYED | Under Construction |
| MMRDA31      | Ghatkopar Metro Stat  | RD24    | R021       | VERIFY           | Under Construction |
| MMRDA32      | R mall Metro Station  | RD18    | R022       | NOT YET VERIFYED | Under Construction |
| MMRDA33      | BKC Metro Station     | RD22    | R023       | VERIFY           | Under Construction |
+--------------+----------------------+---------+------------+------------------+--------------------+
23 rows in set (0.001 sec)
```

SUBQUERIES

Q.1. Display the Building name which is located in "Thane" area.

select Building_no,Building_name,Building_type from Building where Road_no in(select Road_no from Road where City_id in(select City_id from Employee where City_Name="Thane"));

```
MariaDB [loc_tag_project]> select Building_no,Building_name,Building_type from Building where Road_no in
    -> (select Road_no from Road where City_id in(select City_id from Employee where City_Name="Thane"));
+-------------+-------------------------------+----------------------+
| Building_no | Building_name                 | Building_type        |
+-------------+-------------------------------+----------------------+
|           7 | Shivtej Building              | Residential Building |
|          15 | Swami Benglow                 | Residential Building |
|          17 | District School               | Government Building  |
|          19 | Desoza International School   | Educational Building |
|          20 | Lanchika Jwellery  and design shop | Commertial Building |
|          51 | Grampanchayat                 | Government Building  |
+-------------+-------------------------------+----------------------+
6 rows in set (0.001 sec)
```

Q.2. Display the name of building given by the Employee "Priya Shinde".

select Building_no,Building_name,Building_type from Building where Road_no =(select Road_no from Road where City_id =(select City_id from Employee where Emp_name="Priya shindeo"));

```
MariaDB [loc_tag_project]> select Building_no,Building_name,Building_type from Building where Road_no =
    -> (select Road_no from Road where City_id =(select City_id from Employee where Emp_name="Priya shinde"));
+-------------+----------------+----------------------+
| Building_no | Building_name  | Building_type        |
+-------------+----------------+----------------------+
|          21 | Sarswati Niwas | Residential Building |
+-------------+----------------+----------------------+
1 row in set (0.001 sec)
```

Q.3. Display the Metro Station name in "Mumbai" area.

select Metro_Sta_id,Metro_Sta_name from Metro_Station where Road_no in(select Road_no from Road where City_id IN(select City_id from Employee where City_name="Mumbai"));

```
MariaDB [loc_tag_project]> select Metro_Sta_id,Metro_Sta_name from Metro_Station where Road_no in
    -> (select Road_no from Road where City_id IN(select City_id from Employee where City_name="Mumbai"));
+-------------+----------------------+
| Metro_Sta_id | Metro_Sta_name      |
+-------------+----------------------+
| MMRDA13     | Ghatkopar Metro Stat |
| MMRDA18     | Vikroli Metro Statio |
| MMRDA19     | Kanjurmarg Metro Sta |
| MMRDA20     | Bhandup Metro Statio |
| MMRDA21     | Nahur Metro Station  |
| MMRDA22     | Mulund Metro Station |
| MMRDA24     | Matunga Metro Statio |
| MMRDA29     | Mahim Metro Station  |
| MMRDA33     | BKC Metro Station    |
+-------------+----------------------+
9 rows in set (0.005 sec)
```

Q.4. Display the Railway station name whose belong to the Pincode of 421302.

select Rlw_Sta_id,Rlw_Sta_name from Railway_Station where Road_no in(select Road_no from Road where City_id in(select city_id from Employee where Pincode=421302));

```
MariaDB [loc_tag_project]> select Rlw_Sta_id,Rlw_Sta_name from Railway_Station where Road_no in
    -> (select Road_no from Road where City_id in(select city_id from Employee where Pincode=421302));
+------------+---------------------+
| Rlw_Sta_id | Rlw_Sta_name        |
+------------+---------------------+
| R022       | R Mall Railway Stati |
+------------+---------------------+
1 row in set (0.008 sec)
```

Q.5. Display the Railway Station in "Navi Mumbai" City.

select Rlw_Sta_id,Rlw_Sta_name,Latest_update from Railway_Station where Road_no in(select Road_no from Road where City_id in(select City_id from Employee where City_name="Navi Mumbai"));

```
MariaDB [loc_tag_project]> select Rlw_Sta_id,Rlw_Sta_name,Latest_update from Railway_Station where Road_no in
    -> (select Road_no from Road where City_id in(select City_id from Employee where City_name="Navi Mumbai"));
+------------+-------------+--------------------+
| Rlw_Sta_id | Rlw_Sta_name | Latest_update      |
+------------+-------------+--------------------+
| R01        | Airoli      | Name Change        |
| R021       | Ghansoli    | Name Change        |
| R024       | Koparkhairne | Under construction |
| R025       | Turbhe      | Name Change        |
| R026       | Diwa        | Under construction |
| R027       | Sanpada     | Name Change        |
| R029       | Vashi       | Name Change        |
| R04        | Rabale      | Under construction |
+------------+-------------+--------------------+
8 rows in set (0.001 sec)
```

JOINS

Q.1 Display the Road and Metro Station details of share in one table.

select Road.Road_name,Road.Road_type,Metro_Station.Metro_Sta_id,Metro_Station.Metro_Sta_name from Road inner join Metro_Station on Road.Road_no=Metro_Station.Road_no;

```
MariaDB [loc_tag_project]> select Road.Road_name,Road.Road_type,Metro_Station.Metro_Sta_id,Metro_Station.Metro_Sta_name from
    -> Road inner join Metro_Station on Road.Road_no=Metro_Station.Road_no;
+----------------------+----------------+--------------+----------------------+
| Road_name            | Road_type      | Metro_Sta_id | Metro_Sta_name       |
+----------------------+----------------+--------------+----------------------+
| PUNE DISRICT ROAD    | 2 LANE ROAD    | MMPM16       | Puneri Mtero Station |
| ROAD NO 10           | Paved Shoulder | MMPM17       | Pimpri-Chinchwad Met |
| PUNE -NASHIK HIGHWAY | 4 LANE ROAD    | MMPM23       | Sant Tukaran Nagar   |
| KUMTHEKAR ROAD       | Paved Shoulder | MMPM25       | Phugewadi            |
| PIMPARi CHINCHWAD LI | 4 LANE ROAD    | MMPM26       | Khadaki              |
| BAJIRAO ROAD         | 4 LANE ROAD    | MMPM27       | Mandai               |
| Road_No 50           | Paved Shoulder | MMRDA11      | Airoli Metro Station |
| DIGHE ROAD           | Paved Shoulder | MMRDA12      | Thane Metro Station  |
| Lal bahadur shashtri | Paved Shoulder | MMRDA13      | Ghatkopar Metro Stat |
| JAGATAP MARG         | Paved Shoulder | MMRDA14      | Rabale Metro Station |
| NEHARU MARG          | CONCRETE ROAD  | MMRDA15      | Kalawa Metro Station |
| MUMBAI-RAIGAD ROAD   | 2 LANE ROAD    | MMRDA18      | Vikroli Metro Statio |
| MUMBAI-KARJAT ROAD   | 2 LANE ROAD    | MMRDA19      | Kanjurmarg Metro Sta |
| Matoshree Mehata Cho | Paved Shoulder | MMRDA20      | Bhandup Metro Statio |
| MUMBAI-VADODARA      | 4 LANE ROAD    | MMRDA21      | Nahur Metro Station  |
| VIRAR-BORIWALI       | 4 LANE ROAD    | MMRDA22      | Mulund Metro Station |
| MUMBAI-PUNE          | 4 LANE ROAD    | MMRDA24      | Matunga Metro Statio |
| MUMBAI-DELHI         | 8 LANE ROAD    | MMRDA28      | Mubra Metro Station  |
| MUMBAI-NAGPUR        | 6 LANE ROAD    | MMRDA29      | Mahim Metro Station  |
| MUMBAI-DELHI         | 8 LANE ROAD    | MMRDA30      | Kapurbavdi           |
| DADABHAI NAOROJI ROA | Paved Shoulder | MMRDA31      | Ghatkopar Metro Stat |
| THANE-BELAPUR        | Paved Shoulder | MMRDA32      | R mall Metro Station |
| MAHATMA GANDHI ROAD  | Paved Shoulder | MMRDA33      | BKC Metro Station    |
+----------------------+----------------+--------------+----------------------+
23 rows in set (0.062 sec)
```

Q.2.Shows the Employee and road name in one table.

select Employee.Emp_id,Employee.Emp_name,Road.Road_no,Road.Road_name from Employee left join Road on Employee.City_id=Road.City_id UNION select Employee.Emp_id,Employee.Emp_name,Road.Road_no,Road.Road_name from Employee right join Road on Employee.City_id=Road.City_id;

```
MariaDB [LOC_TAG_PROJECT]> select Employee.Emp_id,Employee.Emp_name,Road.Road_no,Road.Road_name from
    -> Employee left join Road on Employee.City_id=Road.City_id
    -> UNION select Employee.Emp_id,Employee.Emp_name,Road.Road_no,Road.Road_name from
    -> Employee right join Road on Employee.City_id=Road.City_id;
+--------+-------------------+---------+----------------------+
| Emp_id | Emp_name          | Road_no | Road_name            |
+--------+-------------------+---------+----------------------+
| E101   | Mahesh Mane       | RD50    | Road_No 50           |
| E110   | Priya shinde      | RD04    | Matoshree Mehata Cho |
| E111   | Reshma raut       | NH06    | MUMBAI-VADODARA      |
| E112   | Ratna sonawane    | SH12    | VIRAR-BORIWALI       |
| E113   | Ashwin tambe      | SH11    | PUNE -NASHIK HIGHWAY |
| E114   | Kali dinkar       | NH31    | MUMBAI-PUNE          |
| E115   | Damodara ghoorpade| RD25    | KUMTHEKAR ROAD       |
| E116   | Dayarama suchin   | SH19    | PIMPARi CHINCHWAD LI |
| E117   | Deepali gupta     | SH23    | BAJIRAO ROAD         |
| E118   | Dhananjay maji    | NH07    | MUMBAI-DELHI         |
| E119   | Dilip gunde       | NH52    | MUMBAI-NAGPUR        |
| E102   | Ruchita lokare    | RD16    | DIGHE ROAD           |
| E120   | Kapila kasagra    | NH04    | MUMBAI-DELHI         |
| E121   | Raghu suri        | RD24    | DADABHAI NAOROJI ROA |
| E122   | Rohan shrihari    | RD18    | THANE-BELAPUR        |
| E123   | Ram pal           | RD22    | MAHATMA GANDHI ROAD  |
| E124   | Savitri himanshu  | RD09    | DURGAMATA ROAD       |
| E125   | Padma yadav       | SH05    | THANE-SATARA         |
| E126   | Atul shriwastav   | SH07    | THANE-SATARA         |
| E127   | Mohit joshi       | SH21    | THANE-SATARA         |
| E128   | Lalit kelli       | RD29    | AAMBEDKAR ROAD       |
| E129   | Kashiram parab    | RD27    | JIJAMATA CHOWK       |
| E103   | Sakshi shelar     | RD03    | Lal bahadur shashtri |
| E130   | Pratham pandey    | RD46    | NEHARU ROAD          |
| E104   | Raghav date       | RD08    | JAGATAP MARG         |
| E105   | Rohit dube        | RD05    | NEHARU MARG          |
| E106   | John fernandes    | RD52    | PUNE DISRICT ROAD    |
| E107   | Jyoti gupta       | RD10    | ROAD NO 10           |
| E108   | Ram chavan        | SH42    | MUMBAI-RAIGAD ROAD   |
| E109   | Lata rathod       | SH02    | MUMBAI-KARJAT ROAD   |
+--------+-------------------+---------+----------------------+
30 rows in set (0.051 sec)

MariaDB [LOC_TAG_PROJECT]>
```

Q.3.Shows the Railway Station and Metro Station in one table.

select Railway_Station. Road_no ,Railway_Station. Rlw_Sta_id, Railway_Station. Rlw_Sta_name, Metro_Station. Metro_Sta_id, Metro_Station. Metro_Sta_name from Railway_Station left join Metro_Station on Railway_Station. Road_no = Metro_Station. Road_no UNION select Railway_Station. Road_no ,Railway_Station. Rlw_Sta_id, Railway_Station. Rlw_Sta_name, Metro_Station. Metro_Sta_id, Metro_Station. Metro_Sta_name from Railway_Station right join Metro_Station on Railway_Station. Road_no = Metro_Station. Road_no

```
MariaDB [LOC_TAG_PROJECT]> select Railway_Station. Road_no ,Railway_Station. Rlw_Sta_id, Railway_Station. Rlw_Sta_name,
    -> Metro_Station. Metro_Sta_id, Metro_Station. Metro_Sta_name from Railway_Station left join Metro_Station on
    -> Railway_Station. Road_no = Metro_Station. Road_no UNION select Railway_Station. Road_no ,Railway_Station. Rlw_Sta_id,
    -> Railway_Station. Rlw_Sta_name, Metro_Station. Metro_Sta_id, Metro_Station. Metro_Sta_name
    -> from Railway_Station right join Metro_Station on Railway_Station. Road_no = Metro_Station. Road_no;
+---------+------------+----------------------+--------------+-----------------------+
| Road_no | Rlw_Sta_id | Rlw_Sta_name         | Metro_Sta_id | Metro_Sta_name        |
+---------+------------+----------------------+--------------+-----------------------+
| RD50    | R01        | Airoli               | MMRDA11      | Airoli Metro Station  |
| SH19    | R010       | Bhandup              | MMPM26       | Khadaki               |
| SH23    | R011       | Nahur                | MMPM27       | Mandai                |
| RD29    | R012       | Mulund               | NULL         | NULL                  |
| SH11    | R013       | Sant Tukaran Nagar R | MMPM23       | Sant Tukaran Nagar    |
| NH31    | R014       | Matunga Road         | MMRDA24      | Matunga Metro Statio  |
| RD25    | R015       | Phugewadi Railway St | MMPM25       | Phugewadi             |
| SH19    | R016       | Khadaki Railway Stat | MMPM26       | Khadaki               |
| SH23    | R017       | Mandai Railway Stati | MMPM27       | Mandai                |
| NH07    | R018       | Mumbra               | MMRDA28      | Mubra Metro Station   |
| NH52    | R019       | Mahim                | MMRDA29      | Mahim Metro Station   |
| RD16    | R02        | Thane Railway Statio | MMRDA12      | Thane Metro Station   |
| NH04    | R020       | Kapurbavadi Railway  | MMRDA30      | Kapurbavdi            |
| RD24    | R021       | Ghansoli             | MMRDA31      | Ghatkopar Metro Stat  |
| RD18    | R022       | R Mall Railway Stati | MMRDA32      | R mall Metro Station  |
| RD22    | R023       | BKC Railway Station  | MMRDA33      | BKC Metro Station     |
| RD09    | R024       | Koparkhairne         | NULL         | NULL                  |
| SH05    | R025       | Turbhe               | NULL         | NULL                  |
| SH05    | R026       | Diwa                 | NULL         | NULL                  |
| SH21    | R027       | Sanpada              | NULL         | NULL                  |
| RD29    | R028       | Shivaji Nagar        | NULL         | NULL                  |
| RD27    | R029       | Vashi                | NULL         | NULL                  |
| RD03    | R03        | Ghatkopar            | MMRDA13      | Ghatkopar Metro Stat  |
| RD46    | R030       | Khar Road            | NULL         | NULL                  |
| RD08    | R04        | Rabale               | MMRDA14      | Rabale Metro Station  |
| RD05    | R05        | Kalawa               | MMRDA15      | Kalawa Metro Station  |
| RD52    | R06        | Pune Railway Station | MMPM16       | Puneri Mtero Station  |
| RD10    | R07        | Pimpri-Chinchwad     | MMPM17       | Pimpri-Chinchwad Met  |
| SH11    | R08        | Vikroli              | MMPM23       | Sant Tukaran Nagar    |
| RD25    | R09        | Kanjurmarga          | MMPM25       | Phugewadi             |
| NULL    | NULL       | NULL                 | MMRDA18      | Vikroli Metro Statio  |
| NULL    | NULL       | NULL                 | MMRDA19      | Kanjurmarg Metro Sta  |
| NULL    | NULL       | NULL                 | MMRDA20      | Bhandup Metro Statio  |
| NULL    | NULL       | NULL                 | MMRDA21      | Nahur Metro Station   |
| NULL    | NULL       | NULL                 | MMRDA22      | Mulund Metro Station  |
+---------+------------+----------------------+--------------+-----------------------+
35 rows in set (0.006 sec)
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Project done by

Prarthana Vengurlekar

TH73/Fun.DS/PS/16thMar/10am - 12pm/R