CODE:

```
MariaDB [practicals]> CREATE table Product_dw
    -> ( prod_id int PRIMARY KEY,
    -> Prod_name varchar(60) NOT NULL,
    -> Prod_category varchar(255) NOT NULL,
    -> Brand_name varchar(255) NOT NULL,
    -> Suppl_name varchar(255) NOT NULL,
    -> Prod_price BIGINT );
Query OK, 0 rows affected (0.073 sec)

MariaDB [practicals]> CREATE table Time_dw
    -> ( time_id int PRIMARY KEY,
    -> day DATE NOT NULL, month
    -> varchar(255) NOT NULL, qt
    -> varchar(255) NOT NULL, yr
    -> varchar(255) NOT NULL);
Query OK, 0 rows affected (0.040 sec)

MariaDB [practicals]> CREATE table Location_dw
    -> ( loc_id int PRIMARY KEY,
    -> street varchar(60) NOT NULL,
    -> city varchar(255) NOT NULL,
    -> state varchar(255) NOT NULL,
    -> country varchar(255) NOT NULL );
Query OK, 0 rows affected (0.037 sec)

MariaDB [practicals]> CREATE table Fact_sales
    -> ( prod_id int REFERENCES Product_dw(prod_id),
    -> time_id int REFERENCES Time_dw(time_id),
    -> loc_id int REFERENCES Location_dw(loc_id),
    -> number_of_unit_sold int NOT NULL,
    -> Total_sales int NOT NULL
    -> );
Query OK, 0 rows affected (0.035 sec)

MariaDB [practicals]> INSERT INTO
    -> PRODUCT_DW(Prod_id,Prod_name,Prod_category,Brand_name,Suppl_name,Prod_price)
    -> VALUES(1,'Rice','Grocery','Dawat','Ramesh',140);
Query OK, 1 row affected (0.020 sec)

MariaDB [practicals]> INSERT INTO PRODUCT_DW(prod_id,Prod_name,Prod_category,Brand_name,
    -> Suppl_name, Prod_price)
    -> VALUES (2,'Sugar','Grocery','Dawat','Ramesh',50 );
Query OK, 1 row affected (0.013 sec)
```

```
MariaDB [practicals]> INSERT INTO PRODUCT_DW(prod_id,Prod_name,Prod_category,Brand_name,
    -> Suppl_name, Prod_price)
    -> VALUES (3,'Kurta','Cloth','Max','Lila',500 );
Query OK, 1 row affected (0.012 sec)

MariaDB [practicals]> INSERT INTO PRODUCT_DW(prod_id,Prod_name,Prod_category,Brand_name,
    -> Suppl_name, Prod_price)
    -> VALUES (4,'Jacket','Cloth','Max','Lila',700 );
Query OK, 1 row affected (0.012 sec)

MariaDB [practicals]> INSERT INTO Time_dw(time_id,day, month,qt,yr)
    -> VALUES (101, DATE '2021-1-17', 'January', 'Q1','2021');
Query OK, 1 row affected (0.022 sec)

MariaDB [practicals]> INSERT INTO Time_dw(time_id,day, month,qt,yr)
    -> VALUES (101, DATE '2021-1-17', 'January', 'Q1','2021');
ERROR 1062 (23000): Duplicate entry '101' for key 'PRIMARY'
MariaDB [practicals]> INSERT INTO Time_dw(time_id, day, month,qt,yr)
    -> VALUES (103, DATE '2021-5-21', 'May', 'Q2','2021');
Query OK, 1 row affected (0.012 sec)

MariaDB [practicals]> INSERT INTO Time_dw (time_id, day, month,qt,yr)
    -> VALUES (104, DATE '2021-6-26', 'June', 'Q2','2021');
Query OK, 1 row affected (0.012 sec)

MariaDB [practicals]> INSERT INTO Location_dw(loc_id,street,city,state,country)
    -> VALUES (201,'ML ROAD','MUMBAI','MAHARASHTRA','INDIA');
Query OK, 1 row affected (0.018 sec)

MariaDB [practicals]> INSERT INTO Location_dw(loc_id,street,city,state,country);
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that correspond

MariaDB [practicals]> VALUES (202,'AI ROAD','MUMBAI','MAHARASHTRA','INDIA');
+-----+---------+--------+-------------+-------+
| 202 | AI ROAD | MUMBAI | MAHARASHTRA | INDIA |
+-----+---------+--------+-------------+-------+
| 202 | AI ROAD | MUMBAI | MAHARASHTRA | INDIA |
+-----+---------+--------+-------------+-------+
1 row in set (0.001 sec)

MariaDB [practicals]> INSERT INTO Location_dw(loc_id,street,city,state,country)
    -> VALUES (203,'BI ROAD','KOLKATA','WEST BENGAL','INDIA');
Query OK, 1 row affected (0.013 sec)
```

```
MariaDB [practicals]> INSERT INTO Location_dw(loc_id,street,city,state,country)
    -> VALUES (204,'DB ROAD','KOLKATA','WEST BENGAL','INDIA');
Query OK, 1 row affected (0.011 sec)

MariaDB [practicals]> INSERT INTO
    -> fact_sales(prod_id,time_id,loc_id,number_of_unit_sold,Total_sales)
    -> VALUES (1,101,201,400,80000);
Query OK, 1 row affected (0.017 sec)

MariaDB [practicals]> INSERT INTO
    -> fact_sales(prod_id,time_id,loc_id,number_of_unit_sold,Total_sales)
    -> VALUES (2,102,201,400,90000);
Query OK, 1 row affected (0.013 sec)

MariaDB [practicals]> INSERT INTO
    -> fact_sales(prod_id,time_id,loc_id,number_of_unit_sold,Total_sales)
    -> VALUES (3,103,201,400,70000);
Query OK, 1 row affected (0.011 sec)

MariaDB [practicals]> INSERT INTO
    -> fact_sales(prod_id,time_id,loc_id,number_of_unit_sold,Total_sales)
    -> VALUES (4,104,201,400,90000);
Query OK, 1 row affected (0.012 sec)

MariaDB [practicals]> INSERT INTO Location_dw(loc_id,street,city,state,country)
    -> VALUES (202,'AI ROAD','MUMBAI','MAHARASHTRA','INDIA');
Query OK, 1 row affected (0.002 sec)
```

OUTPUT:

```
MariaDB [practicals]> select * from fact_sales;
+---------+---------+--------+---------------------+-------------+
| prod_id | time_id | loc_id | number_of_unit_sold | Total_sales |
+---------+---------+--------+---------------------+-------------+
|       1 |     101 |    201 |                 400 |       80000 |
|       2 |     102 |    201 |                 400 |       90000 |
|       3 |     103 |    201 |                 400 |       70000 |
|       4 |     104 |    201 |                 400 |       90000 |
+---------+---------+--------+---------------------+-------------+
4 rows in set (0.001 sec)

MariaDB [practicals]> select * from location_dw;
+--------+---------+---------+-------------+---------+
| loc_id | street  | city    | state       | country |
+--------+---------+---------+-------------+---------+
|    201 | ML ROAD | MUMBAI  | MAHARASHTRA | INDIA   |
|    202 | AI ROAD | MUMBAI  | MAHARASHTRA | INDIA   |
|    203 | BI ROAD | KOLKATA | WEST BENGAL | INDIA   |
|    204 | DB ROAD | KOLKATA | WEST BENGAL | INDIA   |
+--------+---------+---------+-------------+---------+
4 rows in set (0.001 sec)
```

```
MariaDB [practicals]> select * from product_dw;
+---------+-----------+---------------+------------+------------+------------+
| prod_id | Prod_name | Prod_category | Brand_name | Suppl_name | Prod_price |
+---------+-----------+---------------+------------+------------+------------+
|       1 | Rice      | Grocery       | Dawat      | Ramesh     |        140 |
|       2 | Sugar     | Grocery       | Dawat      | Ramesh     |         50 |
|       3 | Kurta     | Cloth         | Max        | Lila       |        500 |
|       4 | Jacket    | Cloth         | Max        | Lila       |        700 |
+---------+-----------+---------------+------------+------------+------------+
4 rows in set (0.001 sec)

MariaDB [practicals]> select * from time_dw;
+---------+------------+---------+----+------+
| time_id | day        | month   | qt | yr   |
+---------+------------+---------+----+------+
|     101 | 2021-01-17 | January | Q1 | 2021 |
|     103 | 2021-05-21 | May     | Q2 | 2021 |
|     104 | 2021-06-26 | June    | Q2 | 2021 |
+---------+------------+---------+----+------+
3 rows in set (0.001 sec)
```