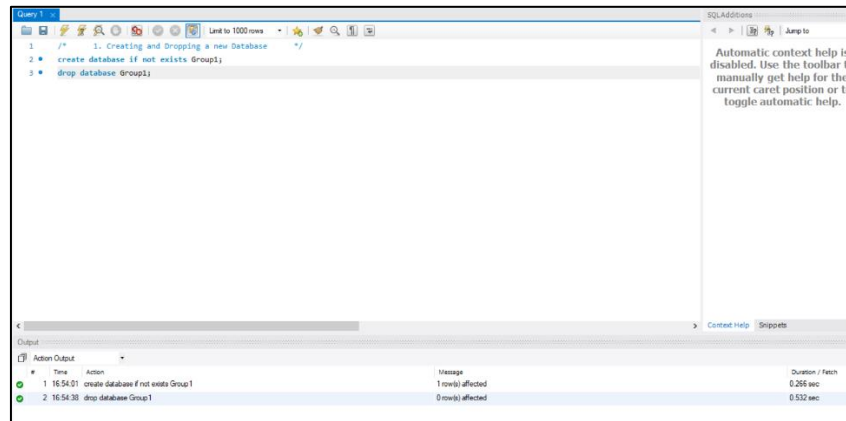


ASSIGNMENT 3

GROUP 1

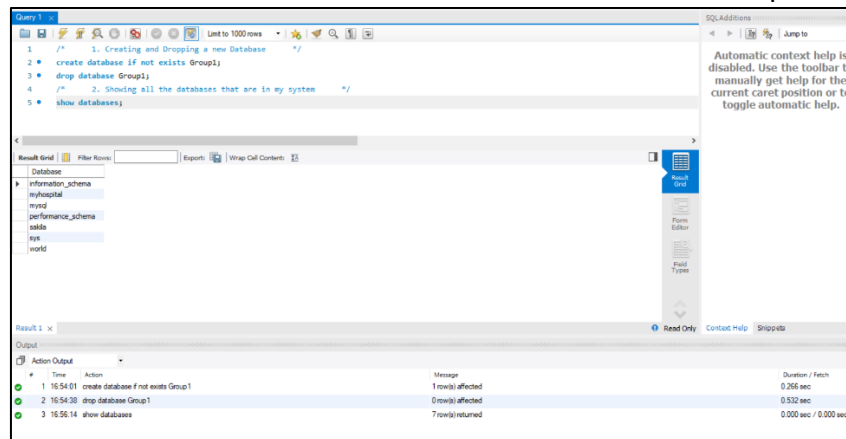
1. Create and Drop Database

We have created and dropped another sample database. Following is the screenshot of the example.



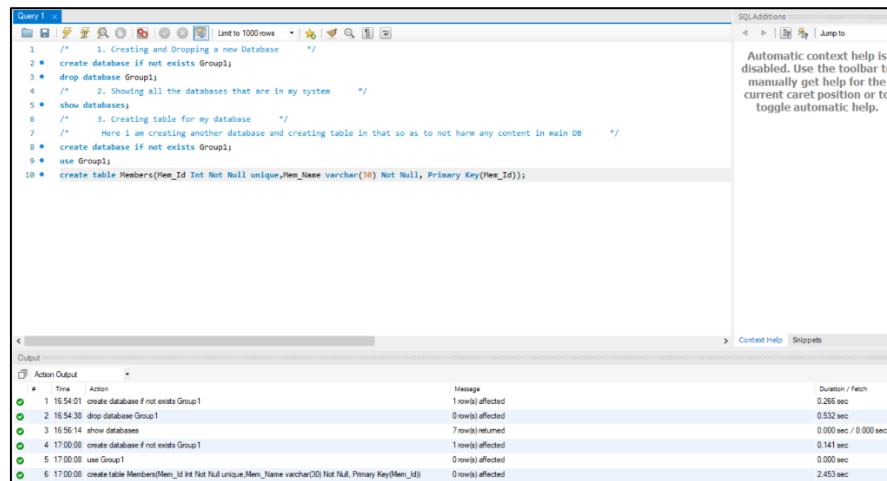
2. List of Databases

The list of all the databases will be shown as done in the screenshot provided.



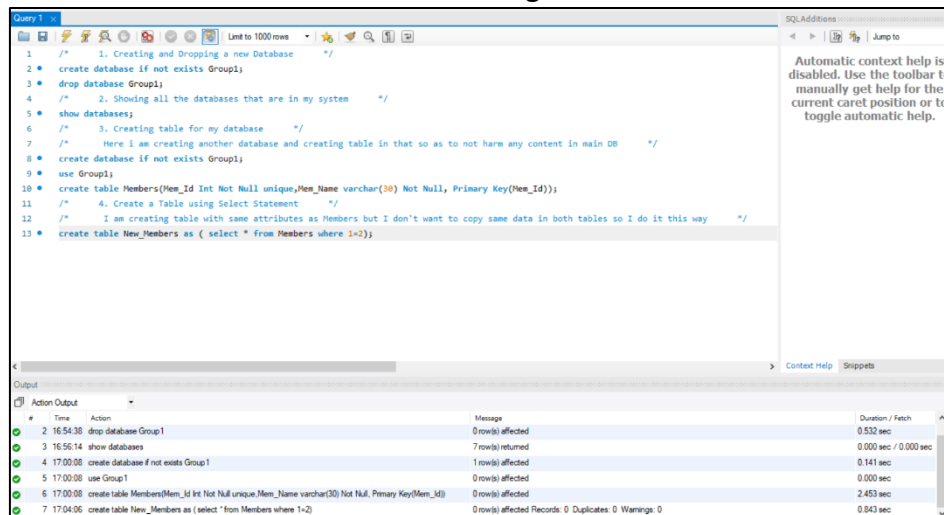
3. Creation of Table for your Database

The table is created in the new database as we did not want to alter any changes in main database. Following is the screenshot of creating a table.



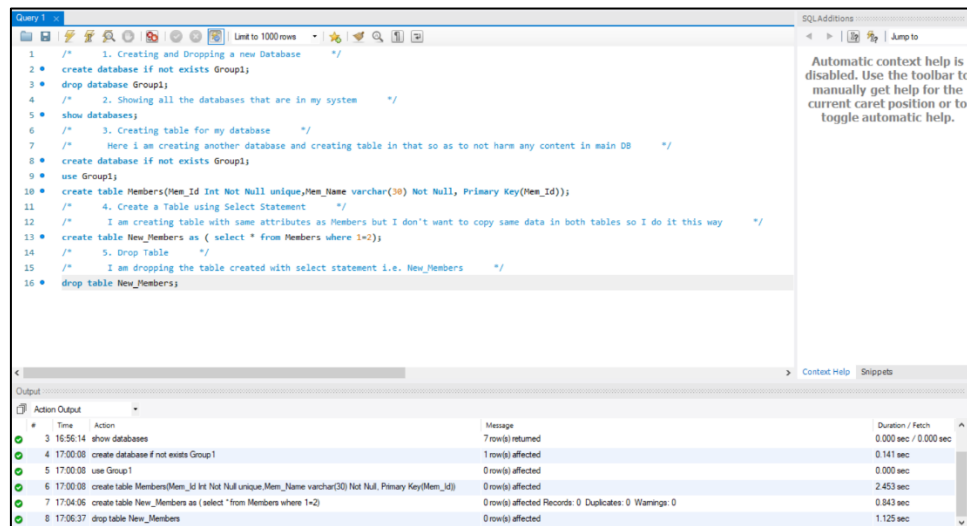
4. Creating Table using Select Statement

Taking one table as reference, we create another table using select statement with same attributes but not same values. Following is the screenshot attached.



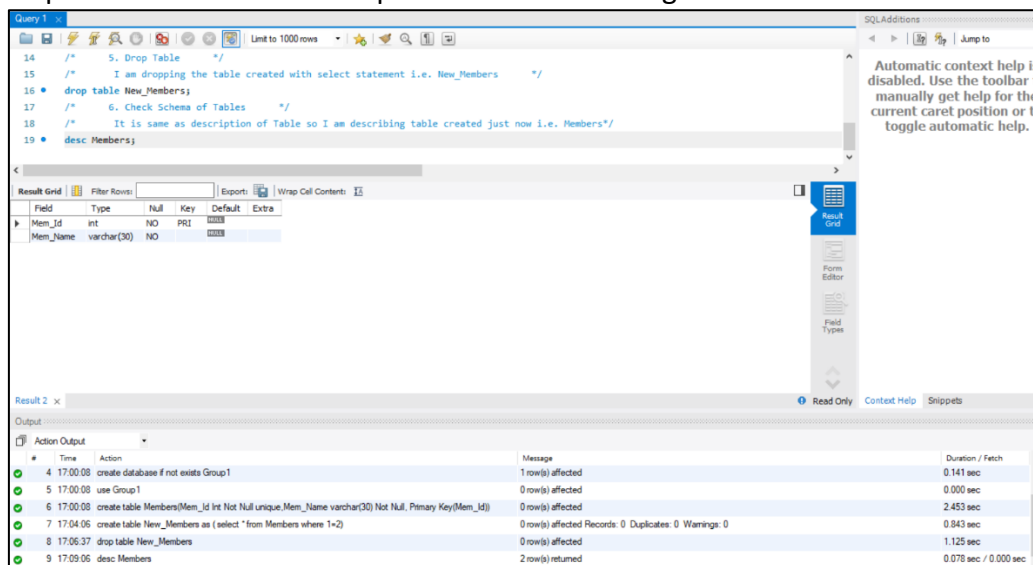
5. Drop Table

We have dropped the new table created using select statement. Following is the screenshot attached.



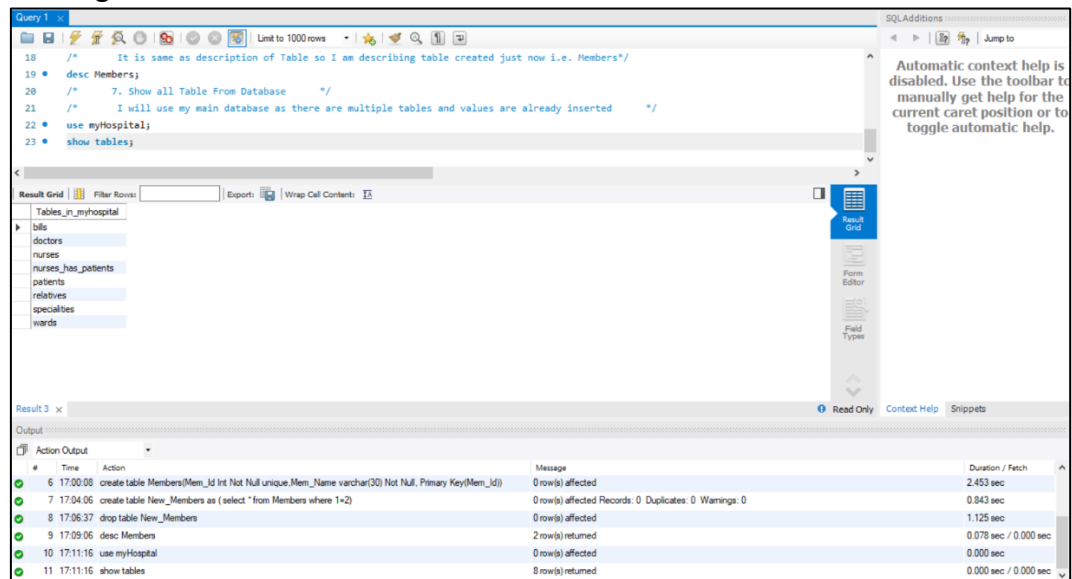
6. Schema of Tables

Schema of table is nothing but the description of table. We have shown the description of the table in Group1 Database. Following is the screenshot attached.



7. All tables from the Database

Here we have used our main database as there are multiple number of tables. Following is the screenshot attached of all the tables.



8. Inserting Rows in each table

We had inserted at least 10 values in each table while creating and designing the database in command line. Following are the screenshots of all the tables with their values.

```
mysql> desc Specialities;
+-----+-----+-----+-----+-----+-----+
| Field          | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| Speciality_Id  | int           | NO   | PRI | NULL    |      |
| Speciality_Name | varchar(100)  | NO   | UNI | NULL    |      |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

```
mysql> select * from Specialities;
+-----+-----+
| Speciality_Id | Speciality_Name |
+-----+-----+
| 101 | Allergy & Immunology |
| 102 | Anesthesiology      |
| 108 | Cardiology          |
| 103 | Dermatology         |
| 104 | Diagnostic Radiology |
| 105 | Emergency Medicine  |
| 106 | Family Medicine     |
| 109 | Hematology          |
| 107 | Internal Medicine   |
| 110 | Neurology           |
+-----+-----+
10 rows in set (0.13 sec)
```

```
mysql> desc Doctors;
```

| Field | Type | Null | Key | Default | Extra |
|---------------|---------------|------|-----|---------|-------|
| Doc_Id | int | NO | PRI | NULL | |
| Doc_Name | varchar(50) | NO | | NULL | |
| Doc_Age | int | NO | | NULL | |
| Doc_Sex | enum('M','F') | NO | | NULL | |
| Speciality_Id | int | NO | MUL | NULL | |

5 rows in set (0.00 sec)

```
mysql> desc Patients;
```

| Field | Type | Null | Key | Default | Extra |
|-------------|---------------|------|-----|---------|-------|
| Pat_Id | int | NO | PRI | NULL | |
| Pat_FName | varchar(25) | NO | | NULL | |
| Pat_LName | varchar(25) | NO | | NULL | |
| Pat_Disease | varchar(100) | NO | | NULL | |
| Pat_Age | int | NO | | NULL | |
| Pat_Sex | enum('M','F') | NO | | NULL | |
| Doc_Id | int | NO | MUL | NULL | |

7 rows in set (0.39 sec)

```
mysql> desc Relatives;
```

| Field | Type | Null | Key | Default | Extra |
|--------------|-------------|------|-----|---------|-------|
| Rel_Id | int | NO | PRI | NULL | |
| Rel_Name | varchar(50) | NO | | NULL | |
| Rel_Relation | varchar(30) | NO | | NULL | |
| Pat_Id | int | NO | MUL | NULL | |

4 rows in set (0.25 sec)

```
mysql> desc Wards;
```

| Field | Type | Null | Key | Default | Extra |
|------------|------|------|-----|---------|-------|
| Ward_Id | int | NO | PRI | NULL | |
| Ward_Floor | int | NO | | NULL | |
| Pat_Id | int | NO | MUL | NULL | |

3 rows in set (0.36 sec)

```
mysql> select * from Doctors;
```

| Doc_Id | Doc_Name | Doc_Age | Doc_Sex | Speciality_Id |
|--------|----------|---------|---------|---------------|
| 201 | Aarav | 52 | M | 101 |
| 202 | Vihaan | 65 | M | 102 |
| 203 | Aditya | 43 | M | 103 |
| 204 | Krishna | 39 | M | 104 |
| 205 | Ishaan | 46 | M | 105 |
| 206 | Jai | 62 | M | 106 |
| 207 | Dhruv | 58 | M | 107 |
| 208 | Shaurya | 52 | M | 108 |
| 209 | Ayush | 65 | M | 109 |
| 210 | Yash | 63 | M | 110 |
| 211 | Anjali | 46 | F | 101 |
| 212 | Devanshi | 42 | F | 102 |
| 213 | Madhuri | 45 | F | 103 |
| 214 | Saloni | 54 | F | 104 |
| 215 | Lata | 60 | F | 105 |
| 216 | Ananya | 49 | F | 106 |
| 217 | Sandhya | 52 | F | 107 |
| 218 | Roopa | 44 | F | 108 |
| 219 | Neelam | 36 | F | 109 |
| 220 | Rekha | 41 | F | 110 |

20 rows in set (0.00 sec)

```
mysql> select * from Patients;
```

| Pat_Id | Pat_FName | Pat_LName | Pat_Disease | Pat_Age | Pat_Sex | Doc_Id |
|--------|-----------|-----------|--------------------|---------|---------|--------|
| 301 | Abdul | Mohammed | Heart Disease | 70 | M | 208 |
| 302 | Abhimanyu | Singh | AutoImmune Disease | 45 | M | 211 |
| 303 | Champak | Chacha | Infectious Disease | 31 | M | 211 |
| 304 | Kabir | Singh | Allergies | 25 | M | 201 |
| 305 | Rohan | Baba | Cancer | 28 | M | 206 |
| 306 | Anushka | Sharma | Stroke | 85 | F | 208 |
| 307 | Bhavani | Patil | Heart Disease | 82 | F | 218 |
| 308 | Charita | N | Asthama | 45 | F | 201 |
| 309 | Garima | Singh | Diabetes | 40 | F | 206 |
| 310 | Nikita | Patil | Neural Disease | 50 | F | 220 |

10 rows in set (0.00 sec)

```
mysql> select * from Relatives;
```

| Rel_Id | Rel_Name | Rel_Relation | Pat_Id |
|--------|----------|--------------|--------|
| 401 | Avni | Friend | 301 |
| 402 | Ishita | Wife | 302 |
| 403 | Sai | Brother | 303 |
| 404 | Saanvi | Friend | 304 |
| 405 | Sneha | Sister | 305 |
| 406 | Zara | Daughter | 306 |
| 407 | Anant | Son | 307 |
| 408 | Hemant | Husband | 308 |
| 409 | Laksh | Brother | 309 |
| 410 | Ranbir | Husband | 310 |

10 rows in set (0.00 sec)

```
mysql> select * from Wards;
```

| Ward_Id | Ward_Floor | Pat_Id |
|---------|------------|--------|
| 501 | 0 | 301 |
| 505 | 0 | 302 |
| 506 | 0 | 307 |
| 509 | 0 | 303 |
| 512 | 1 | 304 |
| 516 | 1 | 305 |
| 525 | 2 | 306 |
| 532 | 3 | 308 |
| 544 | 4 | 310 |
| 546 | 4 | 309 |

10 rows in set (0.00 sec)

```
mysql> desc Nurses;
```

| Field | Type | Null | Key | Default | Extra |
|------------|---------------|------|-----|---------|-------|
| Nurse_Id | int | NO | PRI | NULL | |
| Nurse_Name | varchar(30) | NO | | NULL | |
| Nurse_Age | int | NO | | NULL | |
| Nurse_Sex | enum('M','F') | NO | | NULL | |

4 rows in set (0.30 sec)

```
mysql> desc Nurses_has_Patients;
```

| Field | Type | Null | Key | Default | Extra |
|-----------------|------|------|-----|---------|-------|
| Nurses_Nurse_Id | int | NO | PRI | NULL | |
| Patients_Pat_Id | int | NO | PRI | NULL | |

2 rows in set (0.14 sec)

```
mysql> desc Bills;
```

| Field | Type | Null | Key | Default | Extra |
|------------------|------|------|-----|---------|-------|
| Bill_Id | int | NO | PRI | NULL | |
| Date_Admitted | date | NO | | NULL | |
| Date_Discharged | date | NO | | NULL | |
| Consultation_Fee | int | NO | | NULL | |
| Pat_Id | int | NO | MUL | NULL | |

5 rows in set (0.31 sec)

```
mysql> select * from Nurses;
```

| Nurse_Id | Nurse_Name | Nurse_Age | Nurse_Sex |
|----------|------------|-----------|-----------|
| 601 | Dev | 29 | M |
| 602 | Kriti | 26 | F |
| 603 | Karan | 28 | M |
| 604 | Anna | 29 | F |
| 605 | Rakshit | 30 | M |
| 606 | Sarthak | 32 | M |
| 607 | Manju | 25 | M |
| 608 | Omkar | 26 | M |
| 609 | Jaya | 25 | F |
| 610 | Tanisha | 24 | F |

10 rows in set (0.00 sec)

```
mysql> select * from Nurses_has_Patients;
```

| Nurses_Nurse_Id | Patients_Pat_Id |
|-----------------|-----------------|
| 601 | 301 |
| 601 | 302 |
| 601 | 303 |
| 603 | 302 |
| 604 | 303 |
| 605 | 305 |
| 605 | 306 |
| 606 | 304 |
| 607 | 307 |
| 608 | 308 |
| 609 | 309 |
| 610 | 310 |

12 rows in set (0.00 sec)

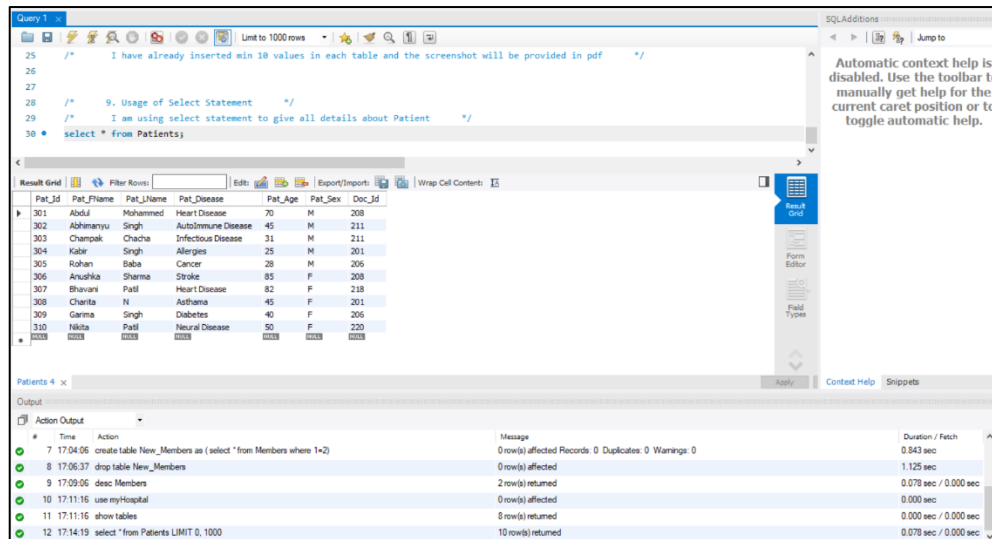
```
mysql> select * from Bills;
```

| Bill_Id | Date_Admitted | Date_Discharged | Consultation_Fee | Pat_Id |
|---------|---------------|-----------------|------------------|--------|
| 801 | 2020-06-10 | 2020-06-19 | 10000 | 301 |
| 802 | 2020-05-31 | 2020-06-13 | 10500 | 302 |
| 803 | 2020-06-01 | 2020-06-06 | 9000 | 303 |
| 804 | 2020-06-03 | 2020-06-05 | 5000 | 304 |
| 805 | 2020-06-10 | 2020-06-29 | 15000 | 305 |
| 806 | 2020-06-11 | 2020-06-15 | 8000 | 306 |
| 807 | 2020-05-15 | 2020-05-30 | 11000 | 307 |
| 808 | 2020-06-11 | 2020-06-26 | 12500 | 308 |
| 809 | 2020-07-02 | 2020-07-04 | 4000 | 309 |
| 810 | 2020-07-03 | 2020-07-23 | 13000 | 310 |

10 rows in set (0.00 sec)

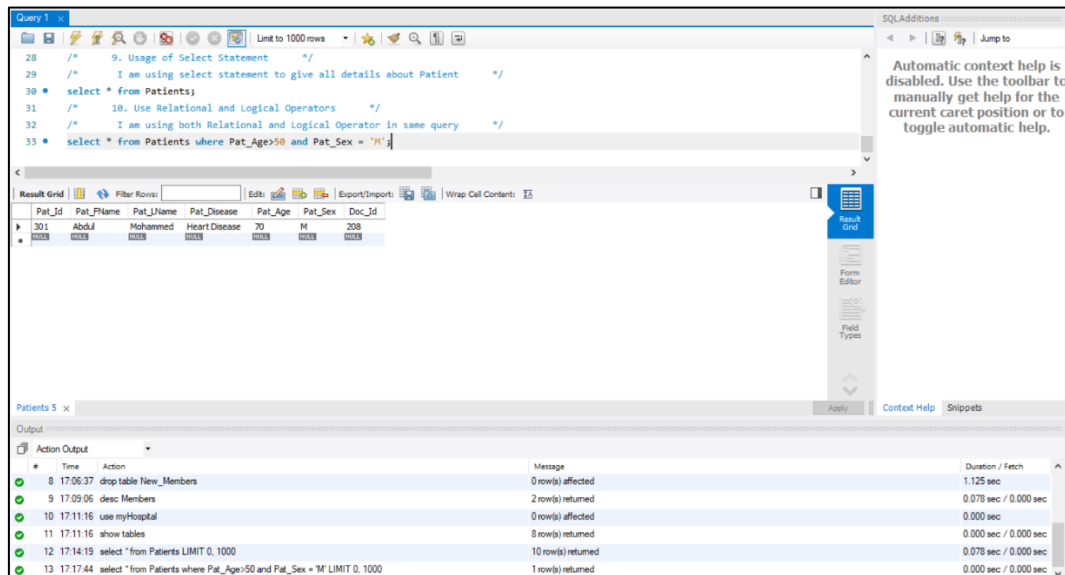
9. Usage of Select Statement

Here we have used the select statement to display all the details of Patients Table. Following is the screenshot attached.



10. Select statement using Relational and Logical Operators

We have used both the relational and logical operator in a same query. Following is the screenshot attached.



11. Usage of Subquery

We have used a subquery to get all the details from Relatives Table. Following is the screenshot attached.

Query 1

```

31 /* 10. Use Relational and Logical Operators */
32 /* I am using both Relational and Logical Operator in same query */
33 select * from Patients where Pat_Age>50 and Pat_Sex = 'M';
34 /* 11. Use a subquery */
35 /* I am getting all details of Relatives where Pat_Id in Patients table is greater than 100 i.e. all because Pat_Id starts from 100
36 select * from Relatives R where R.Pat_Id in (select Pat_Id from Patients where Pat_Id > 100);

```

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

| Rel_Id | Rel_Name | Rel_Relation | Pat_Id |
|--------|----------|--------------|--------|
| 401 | Avni | Friend | 301 |
| 402 | Ishita | Wife | 302 |
| 403 | Sai | Brother | 303 |
| 404 | Saanvi | Friend | 304 |
| 405 | Sneha | Sister | 305 |
| 406 | Zara | Daughter | 306 |
| 407 | Anant | Son | 307 |
| 408 | Hemant | Husband | 308 |
| 409 | Lokesh | Brother | 309 |
| 410 | Ranbir | Husband | 310 |

Relatives 6 x

| # | Time | Action | Message | Duration / Fetch |
|----|----------|--|--------------------|-----------------------|
| 9 | 17:09:06 | desc Members | 2 row(s) returned | 0.078 sec / 0.000 sec |
| 10 | 17:11:16 | use myHospital | 0 row(s) affected | 0.000 sec |
| 11 | 17:11:16 | show tables | 8 row(s) returned | 0.000 sec / 0.000 sec |
| 12 | 17:14:19 | select * from Patients LIMIT 0, 1000 | 10 row(s) returned | 0.078 sec / 0.000 sec |
| 13 | 17:17:44 | select * from Patients where Pat_Age>50 and Pat_Sex = 'M' LIMIT 0, 1000 | 1 row(s) returned | 0.000 sec / 0.000 sec |
| 14 | 17:26:16 | select * from Relatives R where R.Pat_Id in (select Pat_Id from Patients where Pat_Id > 100) LIMIT 0, 1000 | 10 row(s) returned | 0.000 sec / 0.000 sec |

NOTE: ALL THE EXPLANATION IS GIVEN IN THE SCRIPT FILE FOR EACH QUESTIONS WITH QUESTION NUMBERS IN THE COMMENTS.