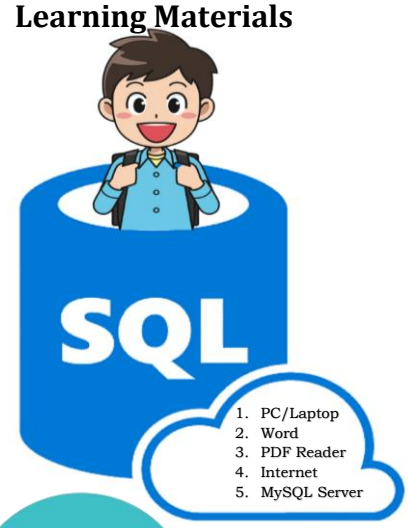
Week2_MO11 - Intro to SQL (Sample Only)	
Lesson Title	Intro to SQL
Learning Outcome(s)	1. Setting up and writing SQL commands using CLI (Command Line Interface) 2. To create a database via a CLI, show list and be able to remove it. 3. To create a table and its structure using basic SQL DDL commands
Time Frame	90 minutes

Learning Materials



Read the lab manual thoroughly! Begin by carefully reading the lab manual provided by your instructor. Pay close attention to the instructions, requirements, and any specific guidelines provided.

1. Answer the assessment on the following pages.
2. Submit answers only by labeling each task name properly, in a. **PDF** format with the following convention/specifications:
   a. FILENAME: DB_WEEK#_<**LASTNAME**>-<TITLE OF THE DOC>
   b. Provide the following in this document (if applicable):
      i. Source Codes **(with your names in the comment)**
      ii. Sample Input/Output **(with your names in the output)**
   c. Font Size : 12
   d. Line Spacing : 1.5
   e. Margins : 1.5 (Left), 1 for all the rest.
3. The deadline for submission is **every next Monday of the week**—a deduction of 10 points per day after the due.
4. Please follow the above instructions and format specifications to avoid ***non-completion, deduction, NO grade, and NFI*** (Not following instructions). To wit,

Item# / Constraints	Deductions
Item 3	**10 points**
Item 3.a	**10 points**
Item 3.b.i	**10 points**
Item 3.b.ii	**10 points**
1 day late (1 minute=1 day late)	**10 points/day**
Work similarity index/copied work	**80 points**

NOTE to Programmers: For strict compliance, late submissions shall be penalized by 10 points (deduction) per day to instill the discipline of timely assessment. One minute is equivalent to a day late. Weekends and Holidays are included or counted. However, all submissions made during or after each Module Summative assessment shall NOT be accepted and considered 0 marks. Further, I will recognize warrant extensions of deadlines for those with severe medical or personal circumstances. Requests for such extensions must be made in writing with the necessary proof/evidence signed by your parents/guardian.

[Laboratory No. 3.1 : Basic DML SQL 1]

1. Output 10 points

```
MariaDB [db_monterola_activitybasicdm1]> CREATE table tbl_pet(pet_id int
(12), pet_name varchar(3), pet_age tinyint(3), pet_gender char (6));
Query OK, 0 rows affected (0.038 sec)
```

2. Output 10 points

```
MariaDB [db_monterola_activitybasicdm1]> INSERT INTO tbl_pet VALUES (1,
'Nymeria','female',5);
Query OK, 1 row affected, 2 warnings (0.116 sec)

MariaDB [db_monterola_activitybasicdm1]> INSERT INTO tbl_pet VALUES (1,'
female',5,'Nymeria');
Query OK, 1 row affected, 2 warnings (0.234 sec)

MariaDB [db_monterola_activitybasicdm1]> INSERT INTO tbl_pet VALUES (1,'
female',5,'Nymeri');
Query OK, 1 row affected, 1 warning (0.004 sec)

MariaDB [db_monterola_activitybasicdm1]> SELECT *from tbl_pet;
+--------+----------+---------+------------+
| pet_id | pet_name | pet_age | pet_gender |
+--------+----------+---------+------------+
|      1 | Nym      |       0 | 5          |
|      1 | fem      |       5 | Nymeri     |
|      1 | fem      |       5 | Nymeri     |
+--------+----------+---------+------------+
3 rows in set (0.002 sec)
```

```
MariaDB [db_monterola_activitybasicdm1]> INSERT INTO tbl_pet VALUES (2,'
Nymeria',5,'female');
Query OK, 1 row affected, 1 warning (0.005 sec)
```

3. Output 10 points

```
MariaDB [db_monterola_activitybasicdm1]> SELECT *from tbl_pet;
+--------+----------+---------+------------+
| pet_id | pet_name | pet_age | pet_gender |
+--------+----------+---------+------------+
|      1 | Nym      |       0 | 5          |
|      1 | fem      |       5 | Nymeri     |
|      1 | fem      |       5 | Nymeri     |
|      2 | Nym      |       5 | female     |
+--------+----------+---------+------------+
4 rows in set (0.001 sec)
```

OBSERVATIONS 10 points

Executing the SELECT * FROM tbl_pet command retrieves and displays all records from the tbl_pet table, affirming that the table is properly populated and accessible, ensuring its readiness for further operations.

4. Output 10 points

```
MariaDB [db_monterola_activitybasicdm1]>  INSERT INTO tbl_pet VALUES(3,'
Jj',15,'male'),(4,'Kelly',8,'female');
Query OK, 2 rows affected, 1 warning (0.003 sec)
Records: 2  Duplicates: 0  Warnings: 1
```

Output 10 points

```
MariaDB [db_monterola_activitybasicdm1]> INSERT INTO tbl_pet(pet_id, pet
_gender) VALUES(5,'male');
Query OK, 1 row affected (0.005 sec)

MariaDB [db_monterola_activitybasicdm1]> SELECT *from tbl_pet;
+--------+----------+---------+------------+
| pet_id | pet_name | pet_age | pet_gender |
+--------+----------+---------+------------+
|      1 | Nym      |       0 | 5          |
|      1 | fem      |       5 | Nymeri     |
|      1 | fem      |       5 | Nymeri     |
|      2 | Nym      |       5 | female     |
|      3 | Jj       |      15 | male       |
|      4 | Kel      |       8 | female     |
|      5 | NULL     |    NULL | male       |
+--------+----------+---------+------------+
7 rows in set (0.002 sec)
```

OBSERVATIONS 10 points

Using the INSERT INTO statement to add multiple rows simultaneously efficiently populates the table with the desired records. The reflected data confirms the seamless execution of the command, highlighting its practical use for batch data entry.

5. Output 10 points

```
MariaDB [db_monterola_activitybasicdm1]> INSERT INTO tbl_pet VALUES(1,'A
menadiel',5,'female'),(4,'Lucifer Morningstar',4,'male');
Query OK, 2 rows affected, 2 warnings (0.004 sec)
Records: 2  Duplicates: 0  Warnings: 2
```

Output 10 points

```
MariaDB [db_monterola_activitybasicdm1]> SELECT *from tbl_pet;
+--------+----------+---------+------------+
| pet_id | pet_name | pet_age | pet_gender |
+--------+----------+---------+------------+
|      1 | Nym      |       0 | 5          |
|      1 | fem      |       5 | Nymeri     |
|      1 | fem      |       5 | Nymeri     |
|      2 | Nym      |       5 | female     |
|      3 | Jj       |      15 | male       |
|      4 | Kel      |       8 | female     |
|      5 | NULL     |    NULL | male       |
|      1 | Ame      |       5 | female     |
|      4 | Luc      |       4 | male       |
+--------+----------+---------+------------+
9 rows in set (0.001 sec)
```

OBSERVATIONS 10 points
Attempting to insert records with duplicate Pet_ID values in the tbl_pet table reveals a critical design flaw: the absence of a **PRIMARY KEY** constraint. This oversight allows duplicate entries, leading to data redundancy and undermining data integrity. A subsequent SELECT query confirms the existence of duplicate entries, emphasizing the importance of implementing proper constraints during database schema design.

6. Output 10 points

```
MariaDB [db_monterola_activitybasicdm1]> TRUNCATE TABLE tbl_pet;
Query OK, 0 rows affected (0.045 sec)
```

OBSERVATIONS 10 points
Executing the TRUNCATE TABLE tbl_pet command removes all records from the table while preserving its structure within the database. Unlike the DROP command, which entirely deletes the table and its data, TRUNCATE ensures the table remains intact but empty. Verifying the operation through a SHOW TABLES command highlights this distinction, reinforcing its utility in data management scenarios where table reuse is necessary.

Formative Task

1. Output 10 points

```
MariaDB [db_monterola_activitybasicdm1]> CREATE TABLE tbl_owner(owner_id
 int(12), owner_name varchar(15), owner_address varchar(15), owner_gende
r varchar(10), owner_contact int(8));
Query OK, 0 rows affected (0.027 sec)
```

2. Output 10 points

```
MariaDB [db_monterola_activitybasicdm1]> INSERT INTO tbl_owner VALUES(1,
'Cain','Davao City','female',22344412);
Query OK, 1 row affected (0.009 sec)
```

3. Output 10 points

```
MariaDB [db_monterola_activitybasicdm1]> SELECT *from tbl_owner;
+----------+------------+---------------+--------------+---------------+
| owner_id | owner_name | owner_address | owner_gender | owner_contact |
+----------+------------+---------------+--------------+---------------+
|        1 | Cain       | Davao City    | female       |      22344412 |
+----------+------------+---------------+--------------+---------------+
1 row in set (0.001 sec)
```

4. Output 10 points

```
MariaDB [db_monterola_activitybasicdm1]> ALTER TABLE tbl_pet ADD(pet_col
or varchar(5), pet_type varchar(10), pet_breed varchar(10), pet_price in
t(12));
Query OK, 0 rows affected (0.103 sec)
Records: 0  Duplicates: 0  Warnings: 0
```

5. Output 10 points

```
INSERT INTO tbl_pet VALUES(1,'Anna','female','White',12,'Dog',Hu...' at line 1
MariaDB [db_monterola_activitybasicdm1]> INSERT INTO tbl_pet VALUES(1,'A
nna','female','White',12,'Dog','Husky',23000.45);
Query OK, 1 row affected, 2 warnings (0.008 sec)

MariaDB [db_monterola_activitybasicdm1]> SELECT *from tbl_pet;
+--------+----------+---------+------------+-----------+----------+-----------+-----------+
| pet_id | pet_name | pet_age | pet_gender | pet_color | pet_type | pet_breed | pet_price |
+--------+----------+---------+------------+-----------+----------+-----------+-----------+
|      1 | Ann      |       0 | White      | 12        | Dog      | Husky     |     23000 |
+--------+----------+---------+------------+-----------+----------+-----------+-----------+
1 row in set (0.002 sec)
```

6. Output 10 points

```
MariaDB [db_monterola_activitybasicdm1]> INSERT INTO tbl_pet VALUES(2,'Will',11,'male','blac
k','cat','pakist',4000),(3,'Nel',9,'female','white','dog','husky',3000);
Query OK, 2 rows affected, 1 warning (0.005 sec)
Records: 2  Duplicates: 0  Warnings: 1
```

7. Output 10 points

```
MariaDB [db_monterola_activitybasicdm1]> INSERT INTO tbl_pet(pet_id, pet_name, pet_gender,pe
t_age) VALUES(1001,'Nymeria','female',5),(1002,'Luh kay','male',4),(3,'Ismael','female',16),
(4,'Anne ann','male',12);
Query OK, 4 rows affected, 4 warnings (0.004 sec)
Records: 4  Duplicates: 0  Warnings: 4
```

8. Output 10 points

```
MariaDB [db_monterola_activitybasicdm1]> SELECT pet_name, pet_gender, pet_type, pet_price fr
om tbl_pet;
+----------+------------+----------+-----------+
| pet_name | pet_gender | pet_type | pet_price |
+----------+------------+----------+-----------+
| Ann      | White      | Dog      |     23000 |
| Wil      | male       | cat      |      4000 |
| Nel      | female     | dog      |      3000 |
| Nym      | female     | NULL     |      NULL |
| Luh      | male       | NULL     |      NULL |
| Ism      | female     | NULL     |      NULL |
| Ann      | male       | NULL     |      NULL |
+----------+------------+----------+-----------+
7 rows in set (0.001 sec)
```

9. Output 10 points

```
MariaDB [db_monterola_activitybasicdm1]> SHOW FIELDS FROM tbl_pet;
+------------+-------------+------+-----+---------+-------+
| Field      | Type        | Null | Key | Default | Extra |
+------------+-------------+------+-----+---------+-------+
| pet_id     | int(12)     | YES  |     | NULL    |       |
| pet_name   | varchar(3)  | YES  |     | NULL    |       |
| pet_age    | tinyint(3)  | YES  |     | NULL    |       |
| pet_gender | char(6)     | YES  |     | NULL    |       |
| pet_color  | varchar(5)  | YES  |     | NULL    |       |
| pet_type   | varchar(10) | YES  |     | NULL    |       |
| pet_breed  | varchar(10) | YES  |     | NULL    |       |
| pet_price  | int(12)     | YES  |     | NULL    |       |
+------------+-------------+------+-----+---------+-------+
8 rows in set (0.060 sec)
```

10. Output 10 points

```
MariaDB [db_monterola_activitybasicdm1]> SELECT *from tbl_pet;
+--------+----------+---------+------------+-----------+----------+-----------+-----------+
| pet_id | pet_name | pet_age | pet_gender | pet_color | pet_type | pet_breed | pet_price |
+--------+----------+---------+------------+-----------+----------+-----------+-----------+
|      1 | Ann      |       0 | White      | 12        | Dog      | Husky     |     23000 |
|      2 | Wil      |      11 | male       | black     | cat      | pakist    |      4000 |
|      3 | Nel      |       9 | female     | white     | dog      | husky     |      3000 |
|   1001 | Nym      |       5 | female     | NULL      | NULL     | NULL      |      NULL |
|   1002 | Luh      |       4 | male       | NULL      | NULL     | NULL      |      NULL |
|      3 | Ism      |      16 | female     | NULL      | NULL     | NULL      |      NULL |
|      4 | Ann      |      12 | male       | NULL      | NULL     | NULL      |      NULL |
+--------+----------+---------+------------+-----------+----------+-----------+-----------+
7 rows in set (0.001 sec)
```

11. Output 10 points

```
MariaDB [db_monterola_activitybasicdm1]> INSERT INTO tbl_owner VALUES (2,'Abi','Cebu City','
male',34243),(3,'Dan','Cebu City','male',243254);
Query OK, 2 rows affected (0.004 sec)
Records: 2  Duplicates: 0  Warnings: 0
```

12. Output 10 points

```
MariaDB [db_monterola_activitybasicdm1]> SELECT *from tbl_owner;
+----------+------------+---------------+--------------+----------------+
| owner_id | owner_name | owner_address | owner_gender | owner_contact |
+----------+------------+---------------+--------------+----------------+
|        1 | Cain       | Davao City    | female       |      22344412 |
|        2 | Abi        | Cebu City     | male         |         34243 |
|        3 | Dan        | Cebu City     | male         |        243254 |
+----------+------------+---------------+--------------+----------------+
3 rows in set (0.002 sec)
```

13. Output 10 points

```
MariaDB [db_monterola_activitybasicdm1]> SHOW FIELDS FROM tbl_owner;
+---------------+-------------+------+-----+---------+-------+
| Field         | Type        | Null | Key | Default | Extra |
+---------------+-------------+------+-----+---------+-------+
| owner_id      | int(12)     | YES  |     | NULL    |       |
| owner_name    | varchar(15) | YES  |     | NULL    |       |
| owner_address | varchar(15) | YES  |     | NULL    |       |
| owner_gender  | varchar(10) | YES  |     | NULL    |       |
| owner_contact | int(8)      | YES  |     | NULL    |       |
+---------------+-------------+------+-----+---------+-------+
5 rows in set (0.042 sec)

MariaDB [db_monterola_activitybasicdm1]> SHOW FIELDS FROM tbl_pet;
+-------------+-------------+------+-----+---------+-------+
| Field       | Type        | Null | Key | Default | Extra |
+-------------+-------------+------+-----+---------+-------+
| pet_id      | int(12)     | YES  |     | NULL    |       |
| pet_name    | varchar(3)  | YES  |     | NULL    |       |
| pet_age     | tinyint(3)  | YES  |     | NULL    |       |
| pet_gender  | char(6)     | YES  |     | NULL    |       |
| pet_color   | varchar(5)  | YES  |     | NULL    |       |
| pet_type    | varchar(10) | YES  |     | NULL    |       |
| pet_breed   | varchar(10) | YES  |     | NULL    |       |
| pet_price   | int(12)     | YES  |     | NULL    |       |
+-------------+-------------+------+-----+---------+-------+
8 rows in set (0.033 sec)
```

[Laboratory No. 3.2: Basic DML SQL 2]

Objective 1

1. Output 10 points

```
MariaDB [db_monterola_activitybasicdm1]> SELECT *from tbl_pet;
+--------+----------+---------+------------+-----------+----------+-----------+-----------+
| pet_id | pet_name | pet_age | pet_gender | pet_color | pet_type | pet_breed | pet_price |
+--------+----------+---------+------------+-----------+----------+-----------+-----------+
|      1 | Ann      |       0 | White      | 12        | Dog      | Husky     |     23000 |
|      2 | Wil      |      11 | male       | black     | cat      | pakist    |      4000 |
|      3 | Nel      |       9 | female     | white     | dog      | husky     |      3000 |
|   1001 | Nym      |       5 | female     | NULL      | NULL     | NULL      |      NULL |
|   1002 | Luh      |       4 | male       | NULL      | NULL     | NULL      |      NULL |
|      3 | Ism      |      16 | female     | NULL      | NULL     | NULL      |      NULL |
|      4 | Ann      |      12 | male       | NULL      | NULL     | NULL      |      NULL |
+--------+----------+---------+------------+-----------+----------+-----------+-----------+
7 rows in set (0.004 sec)

MariaDB [db_monterola_activitybasicdm1]> SELECT *from tbl_owner;
+----------+------------+---------------+--------------+----------------+
| owner_id | owner_name | owner_address | owner_gender | owner_contact |
+----------+------------+---------------+--------------+----------------+
|        1 | Cain       | Davao City    | female       |      22344412 |
|        2 | Abi        | Cebu City     | male         |         34243 |
|        3 | Dan        | Cebu City     | male         |        243254 |
+----------+------------+---------------+--------------+----------------+
3 rows in set (0.001 sec)
```

2. Output 10 points

```
MariaDB [db_monterola_activitybasicdm1]> CREATE TABLE tbl_pet_new SELECT *from tbl_pet;
Query OK, 7 rows affected (0.034 sec)
Records: 7  Duplicates: 0  Warnings: 0

MariaDB [db_monterola_activitybasicdm1]> CREATE TABLE tbl_pet_new_DROP SELECT *from tbl_pet;

Query OK, 7 rows affected (0.019 sec)
Records: 7  Duplicates: 0  Warnings: 0
```

3. Output 10 points

```
MariaDB [db_monterola_activitybasicdm1]> CREATE TABLE tbl_pet_new_truncate SELECT *from tbl_
pet;
Query OK, 7 rows affected (0.056 sec)
Records: 7  Duplicates: 0  Warnings: 0
```

4. Output 10 points

```
MariaDB [db_monterola_activitybasicdm1]> SHOW FIELDS from tbl_pet_new_drop;
+------------+-------------+------+-----+---------+-------+
| Field      | Type        | Null | Key | Default | Extra |
+------------+-------------+------+-----+---------+-------+
| pet_id     | int(12)     | YES  |     | NULL    |       |
| pet_name   | varchar(3)  | YES  |     | NULL    |       |
| pet_age    | tinyint(3)  | YES  |     | NULL    |       |
| pet_gender | char(6)     | YES  |     | NULL    |       |
| pet_color  | varchar(5)  | YES  |     | NULL    |       |
| pet_type   | varchar(10) | YES  |     | NULL    |       |
| pet_breed  | varchar(10) | YES  |     | NULL    |       |
| pet_price  | int(12)     | YES  |     | NULL    |       |
+------------+-------------+------+-----+---------+-------+
8 rows in set (0.048 sec)

MariaDB [db_monterola_activitybasicdm1]> SHOW FIELDS from tbl_pet_new_truncate;
+------------+-------------+------+-----+---------+-------+
| Field      | Type        | Null | Key | Default | Extra |
+------------+-------------+------+-----+---------+-------+
| pet_id     | int(12)     | YES  |     | NULL    |       |
| pet_name   | varchar(3)  | YES  |     | NULL    |       |
| pet_age    | tinyint(3)  | YES  |     | NULL    |       |
| pet_gender | char(6)     | YES  |     | NULL    |       |
| pet_color  | varchar(5)  | YES  |     | NULL    |       |
| pet_type   | varchar(10) | YES  |     | NULL    |       |
| pet_breed  | varchar(10) | YES  |     | NULL    |       |
| pet_price  | int(12)     | YES  |     | NULL    |       |
+------------+-------------+------+-----+---------+-------+
8 rows in set (0.024 sec)

MariaDB [db_monterola_activitybasicdm1]> SHOW FIELDS from tbl_pet_new;
+------------+-------------+------+-----+---------+-------+
| Field      | Type        | Null | Key | Default | Extra |
+------------+-------------+------+-----+---------+-------+
| pet_id     | int(12)     | YES  |     | NULL    |       |
| pet_name   | varchar(3)  | YES  |     | NULL    |       |
| pet_age    | tinyint(3)  | YES  |     | NULL    |       |
| pet_gender | char(6)     | YES  |     | NULL    |       |
| pet_color  | varchar(5)  | YES  |     | NULL    |       |
| pet_type   | varchar(10) | YES  |     | NULL    |       |
| pet_breed  | varchar(10) | YES  |     | NULL    |       |
| pet_price  | int(12)     | YES  |     | NULL    |       |
+------------+-------------+------+-----+---------+-------+
8 rows in set (0.203 sec)
```

5. Output 10 points

```
MariaDB [db_monterola_activitybasicdm1]> SHOW TABLES;
+-----------------------------------------+
| Tables_in_db_monterola_activitybasicdm1 |
+-----------------------------------------+
| tbl_owner                               |
| tbl_pet                                 |
| tbl_pet_new                             |
| tbl_pet_new_drop                        |
| tbl_pet_new_truncate                    |
+-----------------------------------------+
5 rows in set (0.106 sec)
```

6. Output 10 points

```
MariaDB [db_monterola_activitybasicdm1]> DROP TABLE tbl_pet_new_DROP;
Query OK, 0 rows affected (0.180 sec)

MariaDB [db_monterola_activitybasicdm1]> SHOW TABLES;
+----------------------------------------+
| Tables_in_db_monterola_activitybasicdm1 |
+----------------------------------------+
| tbl_owner                              |
| tbl_pet                                |
| tbl_pet_new                            |
| tbl_pet_new_truncate                   |
+----------------------------------------+
4 rows in set (0.002 sec)
```

OBSERVATIONS Output 10 points
The DROP TABLE tbl_pet_new_drop command permanently deletes the specified table from the database. A follow-up SHOW TABLES query confirms its complete removal, demonstrating the irreversible nature of the DROP command and its significance in managing obsolete database objects.

7. Output 10 points

```
MariaDB [db_monterola_activitybasicdm1]> TRUNCATE TABLE tbl_pet_new_truncate;
Query OK, 0 rows affected (0.030 sec)
```

8. Output 10 points

```
MariaDB [db_monterola_activitybasicdm1]> SHOW TABLES;
+----------------------------------------+
| Tables_in_db_monterola_activitybasicdm1 |
+----------------------------------------+
| tbl_owner                              |
| tbl_pet                                |
| tbl_pet_new                            |
| tbl_pet_new_truncate                   |
+----------------------------------------+
4 rows in set (0.003 sec)
```

OBSERVATIONS 10 points
The list of tables displayed excludes the dropped table, confirming that it has been successfully deleted and ensuring that the current state of the database reflects the removal.

9. Output 10 points

```
MariaDB [db_monterola_activitybasicdm1]> SELECT *from tbl_pet_new_truncate;
Empty set (0.001 sec)
```

OBSERVATIONS 10 points
Reviewing the effects of the TRUNCATE command, all records in the table are deleted, but its structure is preserved within the database schema. A subsequent SELECT query confirms that while the table is now empty, it remains available for future use, underscoring its utility in situations requiring a fresh start without redefining the schema.

10. Output 10 points

```
MariaDB [db_monterola_activitybasicdm1]> CREATE TABLE tbl_pet_backup SELECT *from tbl_pet;
Query OK, 7 rows affected (0.022 sec)
Records: 7  Duplicates: 0  Warnings: 0
```

Objective 2

1. Output 10 points

```
MariaDB [db_monterola_activitybasicdm1]> INSERT INTO tbl_pet VALUES(5,'Lan',3,'female','pink

    '> ','cat','pinkcat',9000),(6,'Len',4,'male','white','dog','husk',8000),(7,'Lon',2,'male
','brown','cat','garf',100000),(8,'Yen',8,'female','black','dog','dogi',98000);
Query OK, 4 rows affected (0.006 sec)
Records: 4  Duplicates: 0  Warnings: 0
```

2. Output 10 points

```
MariaDB [db_monterola_activitybasicdm1]> UPDATE tbl_pet set pet_name='Lucia';
Query OK, 11 rows affected, 11 warnings (0.005 sec)
Rows matched: 11  Changed: 11  Warnings: 11

MariaDB [db_monterola_activitybasicdm1]> SELECT *from tbl_pet;
+--------+----------+---------+------------+-----------+----------+-----------+-----------+
| pet_id | pet_name | pet_age | pet_gender | pet_color | pet_type | pet_breed | pet_price |
+--------+----------+---------+------------+-----------+----------+-----------+-----------+
|      1 | Luc      |       0 | White      | 12        | Dog      | Husky     |     23000 |
|      2 | Luc      |      11 | male       | black     | cat      | pakist    |      4000 |
|      3 | Luc      |       9 | female     | white     | dog      | husky     |      3000 |
|   1001 | Luc      |       5 | female     | NULL      | NULL     | NULL      |      NULL |
|   1002 | Luc      |       4 | male       | NULL      | NULL     | NULL      |      NULL |
|      3 | Luc      |      16 | female     | NULL      | NULL     | NULL      |      NULL |
|      4 | Luc      |      12 | male       | NULL      | NULL     | NULL      |      NULL |
|      5 | Luc      |       3 | female     | pink
     | cat      | pinkcat  |       9000 |
|      6 | Luc      |       4 | male       | white     | dog      | husk      |      8000 |
|      7 | Luc      |       2 | male       | brown     | cat      | garf      |    100000 |
|      8 | Luc      |       8 | female     | black     | dog      | dogi      |     98000 |
+--------+----------+---------+------------+-----------+----------+-----------+-----------+
11 rows in set (0.002 sec)
```

OBSERVATIONS 10 points

Executing an UPDATE...SET statement without including a WHERE clause inadvertently updates all rows in the table. For example, running UPDATE tbl_pet SET pet_name = 'Lucia' will set the pet_name of every record to "Lucia." This highlights the critical importance of incorporating a specific WHERE condition to limit changes to only the intended rows. Thoughtful query design is essential to avoid sweeping errors and maintain data accuracy.

Output 10 points

```
MariaDB [db_monterola_activitybasicdm1]> UPDATE tbl_pet set pet_name='Digong' WHERE pet_gend
er='male';
Query OK, 5 rows affected, 5 warnings (0.007 sec)
Rows matched: 5  Changed: 5  Warnings: 5

MariaDB [db_monterola_activitybasicdm1]> SELECT *from tbl_pet;
+--------+----------+---------+------------+-----------+----------+-----------+-----------+
| pet_id | pet_name | pet_age | pet_gender | pet_color | pet_type | pet_breed | pet_price |
+--------+----------+---------+------------+-----------+----------+-----------+-----------+
|      1 | Luc      |       0 | White      | 12        | Dog      | Husky     |     23000 |
|      2 | Dig      |      11 | male       | black     | cat      | pakist    |      4000 |
|      3 | Luc      |       9 | female     | white     | dog      | husky     |      3000 |
|   1001 | Luc      |       5 | female     | NULL      | NULL     | NULL      |      NULL |
|   1002 | Dig      |       4 | male       | NULL      | NULL     | NULL      |      NULL |
|      3 | Luc      |      16 | female     | NULL      | NULL     | NULL      |      NULL |
|      4 | Dig      |      12 | male       | NULL      | NULL     | NULL      |      NULL |
|      5 | Luc      |       3 | female     | pink
     | cat      | pinkcat  |       9000 |
|      6 | Dig      |       4 | male       | white     | dog      | husk      |      8000 |
|      7 | Dig      |       2 | male       | brown     | cat      | garf      |    100000 |
|      8 | Luc      |       8 | female     | black     | dog      | dogi      |     98000 |
+--------+----------+---------+------------+-----------+----------+-----------+-----------+
11 rows in set (0.002 sec)
```

OBSERVATIONS Output 10 points

After running the update, a SELECT * FROM tbl_pet query confirms that all rows now share the same pet_name, illustrating the unintended consequences of omitting a filter. This scenario underscores the need for careful query formulation to safeguard data integrity and prevent widespread inaccuracies.

3. Output 10 points

```
MariaDB [db_monterola_activitybasicdm1]> DELETE FROM tbl_pet WHERE pet_name='Luc';
Query OK, 6 rows affected (0.096 sec)
```

Output 10 points

```
MariaDB [db_monterola_activitybasicdm1]> SELECT *from tbl_pet;
+--------+----------+---------+------------+-----------+----------+-----------+-----------+
| pet_id | pet_name | pet_age | pet_gender | pet_color | pet_type | pet_breed | pet_price |
+--------+----------+---------+------------+-----------+----------+-----------+-----------+
|      2 | Dig      |      11 | male       | black     | cat      | pakist    |      4000 |
|   1002 | Dig      |       4 | male       | NULL      | NULL     | NULL      |      NULL |
|      4 | Dig      |      12 | male       | NULL      | NULL     | NULL      |      NULL |
|      6 | Dig      |       4 | male       | white     | dog      | husk      |      8000 |
|      7 | Dig      |       2 | male       | brown     | cat      | garf      |    100000 |
+--------+----------+---------+------------+-----------+----------+-----------+-----------+
5 rows in set (0.002 sec)
```

OBSERVATIONS 10 points

Executing a DELETE FROM statement with a precise condition, such as removing rows where the pet_name is "Lucia," ensures that only the targeted records are deleted while preserving the rest of the table's data. The inclusion of a WHERE clause is essential to avoid unintentional data loss, as its absence would result in the complete deletion of all records, similar to the effect of the TRUNCATE command.

4. Output 10 points

```
MariaDB [db_monterola_activitybasicdm1]> DELETE from tbl_pet;
Query OK, 5 rows affected (0.005 sec)
```

OBSERVATIONS 10 points

After executing the deletion, a follow-up query confirms that the specified records have been successfully removed, verifying the operation's precision and reinforcing the importance of using filters to control the scope of changes.

5. Output 10 points

```
MariaDB [db_monterola_activitybasicdm1]> INSERT INTO tbl_pet SELECT *from tbl_pet_new;
Query OK, 7 rows affected (0.004 sec)
Records: 7  Duplicates: 0  Warnings: 0
```

6. Output 10 points

```
MariaDB [db_monterola_activitybasicdm1]> INSERT INTO tbl_pet VALUES(1,'Gid',12,'female','whi
te','cat','cathy',9000),(1,'Ged',12,'male','gold','dog','retri',78000),(1,'Gad',10,'female',
'brown','donkey','askal',12000);
Query OK, 3 rows affected (0.004 sec)
Records: 3  Duplicates: 0  Warnings: 0
```

7. Output 10 points

```
MariaDB [db_monterola_activitybasicdm1]> UPDATE tbl_pet SET pet_name='Luh Bee' WHERE pet_id=
4;
Query OK, 1 row affected, 1 warning (0.005 sec)
Rows matched: 1  Changed: 1  Warnings: 1
```

8. Output 10 points

```
MariaDB [db_monterola_activitybasicdm1]> UPDATE tbl_pet SET pet_id=10 WHERE pet_id=1;
Query OK, 4 rows affected (0.049 sec)
Rows matched: 4  Changed: 4  Warnings: 0
```

9. Output 10 points

```
MariaDB [db_monterola_activitybasicdm1]> DELETE FROM tbl_pet WHERE pet_id=10;
Query OK, 4 rows affected (0.097 sec)
```

10. Output 10 points

```
MariaDB [db_monterola_activitybasicdm1]> INSERT INTO tbl_pet(pet_id,pet_name,pet_gender,pet_
age) SELECT 2,'Wil','female',2 FROM tbl_pet WHERE pet_id=1002;
Query OK, 1 row affected (0.007 sec)
Records: 1  Duplicates: 0  Warnings: 0
```

11. Output 10 points

```
MariaDB [db_monterola_activitybasicdm1]> INSERT INTO tbl_pet(pet_color,pet_type,pet_breed,pe
t_price) SELECT 'brown','cat','cathy',9000 FROM tbl_pet WHERE pet_id=4;
Query OK, 1 row affected (0.005 sec)
Records: 1  Duplicates: 0  Warnings: 0
```

12. Output 10 points

```
MariaDB [db_monterola_activitybasicdm1]> INSERT INTO tbl_owner(owner_gender) SELECT 'male' F
ROM tbl_owner WHERE owner_id=3;
Query OK, 1 row affected (0.004 sec)
Records: 1  Duplicates: 0  Warnings: 0
```

13. Output 10 points

```
MariaDB [db_monterola_activitybasicdm1]> SELECT *from tbl_owner;
+----------+------------+---------------+--------------+----------------+
| owner_id | owner_name | owner_address | owner_gender | owner_contact  |
+----------+------------+---------------+--------------+----------------+
|        1 | Cain       | Davao City    | female       |       22344412 |
|        2 | Abi        | Cebu City     | male         |          34243 |
|        3 | Dan        | Cebu City     | male         |         243254 |
+----------+------------+---------------+--------------+----------------+
3 rows in set (0.001 sec)

MariaDB [db_monterola_activitybasicdm1]> SELECT *from tbl_pet;
+--------+----------+---------+------------+-----------+----------+-----------+-----------+
| pet_id | pet_name | pet_age | pet_gender | pet_color | pet_type | pet_breed | pet_price |
+--------+----------+---------+------------+-----------+----------+-----------+-----------+
|   1001 | Nym      |       5 | female     | NULL      | NULL     | NULL      |      NULL |
|   1002 | Luh      |       4 | male       | NULL      | NULL     | NULL      |      NULL |
|      4 | Luh      |      12 | male       | brown     | cat      | cathy     |      9000 |
+--------+----------+---------+------------+-----------+----------+-----------+-----------+
3 rows in set (0.001 sec)
```

[Laboratory No. 3.3: Simple Database Backup]

Task	SQL and OUTPUT

a. Create a new database name: surname_backup	`C:\xampp\mysql\bin>mysql -u root -p -e "CREATE DATABASE monterola_backup "`
	`Enter password:`
	
	`C:\xampp\mysql\bin>`

b. Export .sql file: surname_dbBackup. sq l	`C:\xampp\mysql\bin>mysqldump -u root -p monterola_backup > monterola_dbB ackup.sql` `Enter password:`
c. Import the .sql file to your new database name created in task A.	`C:\xampp\mysql\bin>mysql -u root -p db_monterola_activitybasicdm1 < mont erola_dbBackup.sql`

d. Show all your databases	`MariaDB [(none)]> SHOW DATABASES;`
	`+----------+`
	`| Database |`
	`+----------+`
	`| db_monterola_activitybasicdm1 |`
	`| information_schema |`
	`| monterola_backup |`
	`| mysql |`
	`| performance_schema |`
	`| phpmyadmin |`
	`| test |`
	`+----------+`
	`7 rows in set (0.002 sec)`

e. Use the surname_backup database and show all tables	`MariaDB [(none)]> USE monterola_backup;`
	`Database changed`
	`MariaDB [monterola_backup]> SHOW TABLES;`
	`Empty set (0.002 sec)`

Insights 20 points

This task delves into mastering essential database management techniques using MySQL, with a particular focus on exporting and importing database files. The process begins by guiding users through creating a comprehensive backup of an existing database via the mysqldump command, generating a .sql file that encapsulates both the database structure and its data. Next, it explores the seamless restoration of this backup into a newly created database, effectively replicating the original. To ensure accuracy and reliability, the task highlights verifying the success of these operations by listing available databases and inspecting the contents of tables in the restored database. Practical exercises, such as creating a database with a specified naming format, exporting its data, and re-importing the file, are integral to developing hands-on expertise. These foundational skills are indispensable for maintaining database integrity and reliability, especially in critical scenarios like data migration and disaster recovery.