Jonah Aney CSD310 Module 5.2 Assignment: My SQL Functions

Database and table creation:

```
mysql> CREATE DATABASE test_db;
Query OK, 1 row affected (0.02 sec)

mysql> USE test_db;
Database changed
mysql> CREATE TABLE family (
    ->     first_name TEXT,
    ->     last_name TEXT,
    ->     birth_date DATE,
    ->     fav_color TEXT
    -> );
Query OK, 0 rows affected (0.05 sec)
```

```
mysql> SHOW DATABASES;
+--------------------+
| Database           |
+--------------------+
| information_schema |
| movies             |
| mysql              |
| performance_schema |
| sakila             |
| sys                |
| test_db            |
| world              |
+--------------------+
8 rows in set (0.02 sec)
```

```
mysql> SHOW TABLES;
+-------------------+
| Tables_in_test_db |
+-------------------+
| family            |
+-------------------+
1 row in set (0.01 sec)
```

```
mysql> INSERT INTO FAMILY (first_name, last_name, birth_date, fav_color)
    -> values
    -> ('Nicole', 'Aney', '1985-10-30', 'Red'),
    -> ('Holly', 'Aney', '2016-10-30', 'Yellow'),
    -> ('Mackenzie', 'Aney', '2021-06-24', 'Pink');
Query OK, 3 rows affected (0.01 sec)
Records: 3  Duplicates: 0  Warnings: 0
```

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Family table:

```
mysql> SELECT * FROM family;
+------------+-----------+------------+-----------+
| first_name | last_name | birth_date | fav_color |
+------------+-----------+------------+-----------+
| Nicole     | Aney      | 1985-10-30 | Red       |
| Holly      | Aney      | 2016-10-30 | Yellow    |
| Mackenzie  | Aney      | 2021-06-24 | Pink      |
+------------+-----------+------------+-----------+
3 rows in set (0.00 sec)
```

Using the 'YEAR' command with the alias, 'birth_year' to show each member's birth year only.

```
mysql> select first_name, year(birth_date) as birth_year
    -> from family;
+------------+------------+
| first_name | birth_year |
+------------+------------+
| Nicole     |       1985 |
| Holly      |       2016 |
| Mackenzie  |       2021 |
+------------+------------+
3 rows in set (0.01 sec)
```

Using the 'DATDIFF' command with the alias, 'This many days old!' to show how year.many days each family member has been alive for fun trivia

```
mysql> select first_name, datediff(curdate(), birth_date) as "This_many_days_old!"
    -> from family;
+------------+---------------------+
| first_name | This_many_days_old! |
+------------+---------------------+
| Nicole     |               14409 |
| Holly      |                3086 |
| Mackenzie  |                1388 |
+------------+---------------------+
3 rows in set (0.00 sec)
```

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Using the 'UPPER' command with alias "ColorsAllCaps" to change colors to uppercase for showcasing specific data to a team or a change in preference of how the data appears.

```
mysql> select upper(fav_color) as ColorsAllCaps from family;
+---------------+
| ColorsAllCaps |
+---------------+
| RED           |
| YELLOW        |
| PINK          |
+---------------+
3 rows in set (0.00 sec)
```

Using the 'REPLACE' command with the alias "new_fav_color" to make updates with data.

```
mysql>  select fav_color, replace(fav_color, 'Red', 'Maroon') as new_fav_color from family;
+-----------+---------------+
| fav_color | new_fav_color |
+-----------+---------------+
| Red       | Maroon        |
| Yellow    | Yellow        |
| Pink      | Pink          |
+-----------+---------------+
3 rows in set (0.00 sec)
```

Functions using today's date, 04-13-2025:

Using 'WEEKOFYEAR' command with the alias "The current week of 2025" in case you are tracking data by the week.

```
mysql> select weekofyear("2025-04-13") as "The current week of 2025";
+--------------------------+
| The current week of 2025 |
+--------------------------+
|                       15 |
+--------------------------+
1 row in set (0.01 sec)
```

Using the 'DAYNAME' command with the alias "Day_of_the_week". Use this to show the day as it might be more meaningful when using or comparing data.

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```
mysql> select dayname ('2025-04-13') as Day_of_the_week;
+-----------------+
| Day_of_the_week |
+-----------------+
| Sunday          |
+-----------------+
```