

Filtering Text Data & Nulls - p2

Filtering Text Data & Nulls - p2

```
mysql> DESC people;
+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+
| id    | int  | YES  |     | NULL    |      |
| Name  | text  | YES  |     | NULL    |      |
| birth_date | text | YES  |     | NULL    |      |
| Date of Death | text | YES  |     | NULL    |      |
+-----+-----+-----+-----+-----+
4 rows in set (0.02 sec)

mysql> ALTER TABLE people CHANGE COLUMN `Date of Death` `dateOfDeath` text;
Query OK, 0 rows affected (0.10 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> DESC people;
+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+
| id    | int  | YES  |     | NULL    |      |
| Name  | text  | YES  |     | NULL    |      |
| birth_date | text | YES  |     | NULL    |      |
| dateOfDeath | text | YES  |     | NULL    |      |
+-----+-----+-----+-----+-----+
4 rows in set (0.01 sec)

mysql> UPDATE people SET birth_date = NULL where birth_date LIKE "";
Query OK, 0 rows affected (0.01 sec)
Rows matched: 0  Changed: 0  Warnings: 0

mysql> SELECT * FROM people LIMIT 10;
+----+-----+-----+-----+
| id | Name          | birth_date | dateOfDeath |
+----+-----+-----+-----+
| 1  | Cent          | 1975-07-06 |             |
| 2  | AMichaelBaldwin | 1963-04-04 |             |
| 3  | ARavenCruz    | NULL        |             |
| 4  | AJBuckley     | 1978-02-09 |             |
| 5  | AJDeLucia     | NULL        |             |
| 6  | AJLanger       | 1974-05-22 |             |
| 7  | Aaliyah        | 1979-01-16 | 2001-08-25 |
| 8  | AaronAshmore   | 1979-10-07 |             |
| 9  | AaronHann      | NULL        |             |
| 10 | AaronHill      | 1983-04-23 |             |
+----+-----+-----+-----+
10 rows in set (0.00 sec)

mysql> SELECT Name , birth_date FROM people WHERE birth_date is Null Limit 10;
+-----+-----+
| Name          | birth_date |
+-----+-----+
| ARavenCruz    | NULL        |
| AJDeLucia     | NULL        |
| AaronHann     | NULL        |
| AaronHughes   | NULL        |
| AaronSchneider | NULL        |
| AaronStaton   | NULL        |
| AasheekaaBathija | NULL        |
| AbbyMukiibiNkaaga | NULL        |
| AbigailEvans  | NULL        |
| AdamBoyer     | NULL        |
+-----+-----+
10 rows in set (0.00 sec)
```

```
mysql> SELECT name , birth_date FROM people WHERE birth_date IS NOT NULL limit 10;
+-----+-----+
| name | birth_date |
+-----+-----+
| Cent | 1975-07-06 |
| AMichaelBaldwin | 1963-04-04 |
| AJBuckley | 1978-02-09 |
| AJLanger | 1974-05-22 |
| Aaliyah | 1979-01-16 |
| AaronAshmore | 1979-10-07 |
| AaronHill | 1983-04-23 |
| AaronKwok | 1965-10-26 |
| AaronSeltzer | 1974-01-12 |
| AaronStanford | 1976-12-27 |
+-----+-----+
10 rows in set (0.00 sec)
```

Table: Movies

Id	Title	Director	Year	Length_minutes
1	Toy Story	John Lasseter	1995	81
2	A Bug's Life	John Lasseter	1998	95
3	Toy Story 2	John Lasseter	1999	93
4	Monsters, Inc.	Pete Docter	2001	92
5	Finding Nemo	Andrew Stanton	2003	107
6	The Incredibles	Brad Bird	2004	116
7	Cars	John Lasseter	2006	117
8	Ratatouille	Brad Bird	2007	115
9	WALL-E	Andrew Stanton	2008	104
10	Up	Pete Docter	2009	101

Exercise 3 — Tasks

- Find all the Toy Story movies ✓ `SELECT * FROM movies WHERE title LIKE "Toy Story%" ;`
- Find all the movies directed by John Lasseter `SELECT * FROM movies WHERE Director = "John Lasseter" ;`
- Find all the movies (and director) not directed by John Lasseter `SELECT * FROM movies WHERE Director NOT LIKE "John Lasseter" ;`
- Find all the WALL-* movies `SELECT * FROM movies WHERE title LIKE "WALL-_" ;`

Exercise 3 — Tasks

- Find all the Toy Story movies ✓ `SELECT * FROM movies WHERE title LIKE "Toy Story%" ;`
- Find all the movies directed by John Lasseter `SELECT * FROM movies WHERE Director = "John Lasseter" ;`
- Find all the movies (and director) not directed by John Lasseter `SELECT * FROM movies WHERE Director NOT LIKE "John Lasseter" ;`
- Find all the WALL-* movies `SELECT * FROM movies WHERE title LIKE "WALL-_" ;`

TimeStamp -- "Date Time" --- "05-11-2024 21:05:44"



NOW()

Surveillance room

Instagram

Create a post --- Timestamp hit. Now()

- Write an SQL query to find all product names that start with "Lap".

```
sqlCopy code
SELECT product_name
FROM products
WHERE product_name LIKE 'Lap%';
```

2. Retrieve Customer Names with 'a' as the Second Character

- Write an SQL query to find all customer names where the second character is 'a'.

```
sqlCopy code
SELECT name
FROM customers
WHERE name LIKE '_a%';
```

3rd Character = ___a%

4th character = ____a%

Find Orders Not Shipped or Delivered

- Write an SQL query to find all orders where the status is not 'Shipped' or 'Delivered'.

SQL

```
sqlCopy code
SELECT order_id, status
FROM orders
WHERE status NOT IN ('Shipped', 'Delivered');
```



status (ENUM: 'Pending', 'Shipped', 'Delivered', 'Cancelled')

where status in ("Pending", "Cancelled");

4. Retrieve Products with 'phone' Anywhere in the Name

- Write an SQL query to find all product names that contain 'phone' anywhere in the name.

SQL

```
sqlCopy code
SELECT product_name
FROM products
WHERE product_name LIKE '%phone%';
```

5. Find Products with Exactly 7 Characters in Name

- Write an SQL query to find all products with exactly 7 characters in their name.

SQL

```
sqlCopy code
SELECT product_name
FROM products
WHERE product_name LIKE '_____';
```

PIN CODE - _____ 6 digit.

6. Retrieve Products Not in Certain Categories

- Write an SQL query to find all products that are not in the 'Electronics' or 'Clothing' categories.

SQL

```
sqlCopy code
SELECT product_name, category
FROM products
WHERE category NOT IN ('Electronics', 'Clothing');
```

Category NOT LIKE "Electronics" AND Category NOT LIKE "Clothing";

AND ! -- NOT IN

7. Find Customers Without Email Addresses

- Write an SQL query to find all customers who have not provided an email address.

SQL

```
sqlCopy code
SELECT name
FROM customers
WHERE email IS NULL;
```

8. Find Customers with Email Addresses

- Write an SQL query to find all customers who have provided an email address.

SQL

```
sqlCopy code
SELECT name, email
FROM customers
WHERE email IS NOT NULL;
```

9. Retrieve Orders Placed in Specific Years

- Write an SQL query to find all orders placed in the years 2021, 2022, or 2023.

SQL

```
sqlCopy code
SELECT order_id, order_date
FROM orders
WHERE EXTRACT(YEAR FROM order_date) IN (2021, 2022, 2023);
```

YEAR(05-11-2024) - 2024

YEAR --- (2021, 2022, 2023)

05-11-2024 == 2021

True, False

order_date	
05-11-2024	2024
11-02-2000	2000
12-09-1999	1999
14-02-2001	2001
09-11-2021	2021
	True

21 <> 21 == False
21 = 21 -- True

Where Clause --- Filter row basis : Boolean

10. Retrieve Customer Names Starting with 'Jo'

- Write an SQL query to find all customer names that start with 'Jo'.

SQL

```
sqlCopy code
SELECT name
FROM customers
WHERE name LIKE 'Jo%';
```

11. Find Products with 'Smart' in Name but Not at the Start

- Write an SQL query to find all product names that contain 'Smart' but do not start with it.

SQL

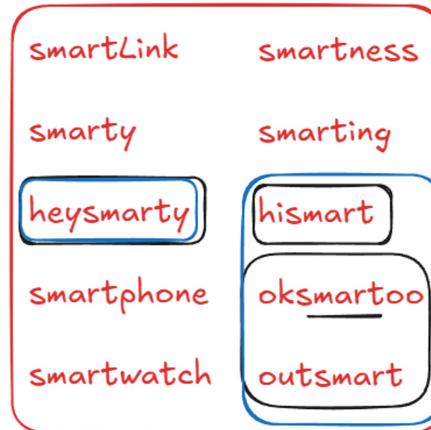
```
sqlCopy code
SELECT product_name
FROM products
WHERE product_name LIKE '%smart%' AND product_name NOT LIKE 'Smart%';
```

Like "%smart%" OR like "%smart";

Oth character mein it acts same like starts with.

3 situation -

1. Starts with
2. Middle one
3. Ends with



12. Find Orders with Total Amount Greater than 100

- Write an SQL query to find all orders where the total amount is greater than 100.

SQL

```
sqlCopy code
SELECT order_id, total_amount
FROM orders
WHERE total_amount > 100;
```