

## Introduction to SQL Part 1

Today's lab is all about writing SQL code to pull data from databases.

This is essential knowledge for all data-related careers, including:

- Data analyst
- Database administrator
- Data scientist
- Data engineer

## Write SQL code to retrieve data from the Chinook database

All of today's questions are based on the tracks table from the Chinook database.

### Tracks

TrackId	Name	AlbumId	MediaTypeId	GenreId	Milliseconds	Bytes	UnitPrice
11	C.O.D.	1	1	1	199836	6566314	0.99
119	Roadrunner	12	1	5	143595	2301989	0.99
691	Have You Ever Seen The Rain?	54	1	1	160052	5263675	0.99
1089	Is This Love (Live)	86	1	7	295262	9819759	0.99
1136	Boulevard Of Broken Dreams	89	1	4	260858	8485122	0.99
1388	Children Of The Damned	112	1	3	274364	3845631	0.99
1395	Sign Of The Cross	113	1	1	678008	27121792	0.99
1548	Breaking The Law (Live)	125	1	3	144195	4728246	0.99
1766	Ainda Lembro	145	1	7	218801	7211247	0.99
1959	Aos Leões	161	1	16	234684	7790574	0.99
1990	Smells Like Teen Spirit	163	1	1	287190	9425215	0.99
2344	Maluco Beleza	192	1	1	203206	6628067	0.99
2407	The Trees	196	1	1	285126	9345473	0.99
2576	Sometimes Salvation	209	1	6	389146	12749424	0.99
2743	Baba O'Riley	221	1	1	309472	10141660	0.99
2786	O Pulso	224	1	4	199131	6566998	0.99
3116	Loving The Alien	246	1	1	348786	11412762	0.99
3157	Papel Principal	248	1	7	217495	7325302	0.99

1. Write a SQL query to get **all columns** from the **tracks** table.

```
SELECT * FROM tracks;
```

2. Write a SQL query to select only the **Name column** from the **tracks** table.

```
SELECT Name FROM tracks;
```

3. Write a SQL query to select the **Name**, **MediaTypeId** and **Milliseconds** columns in that order from the **tracks** table.

```
SELECT Name, MediaTypeId, Milliseconds FROM tracks;
```

4. Rewrite your SQL query from **question 3** so that the results are **sorted by** the **Milliseconds** column. Use the **default sorting order**.

```
SELECT Name, MediaTypeId, Milliseconds  
FROM tracks  
ORDER BY Milliseconds;
```

5. Rewrite your SQL query from question 4 so that the results are sorted in **descending order** **based on Milliseconds**.

```
SELECT Name, MediaTypeId, Milliseconds  
FROM tracks  
ORDER BY Milliseconds DESC;
```

6. Rewrite your SQL query from question 5 so that it also selects **AlbumId** after Name.

```
SELECT Name, AlbumId, MediaTypeId, Milliseconds  
FROM tracks  
ORDER BY Milliseconds DESC;
```

7. Rewrite your SQL query from question 6 so that it **sorts by AlbumId** first (in ascending order) and **Milliseconds second** (in descending order).

```
SELECT Name, AlbumID, MediaTypeId, Milliseconds  
FROM tracks  
ORDER BY AlbumId, Milliseconds DESC;
```

8. Rewrite your SQL query from question 7 so that it only selects those rows with GenreId equal to

```
SELECT Name, AlbumID, MediaTypeId, Milliseconds  
FROM tracks  
WHERE GenreId = 1  
ORDER BY AlbumId, Milliseconds DESC;
```