

## In-class Exercise: Simple SQL Queries (20 Apr 2023)

CSC105 WEB APPLICATION DEVELOPMENT

**Due Date:** Sunday, 23 April 2023, 11:59 PM. Submit on the **SQL Playground**  
(<https://sqlworkshop.bsthun.com/>)

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### Installation Instructions:

1. Register JetBrains Free Education License.  
(<https://www.jetbrains.com/community/education/#students>)
  2. Download DataGrip Software.  
(<https://www.jetbrains.com/datagrip/download/#section=windows>)
  3. Go to SQL Playground website and start the workshop. (<https://sqlworkshop.bsthun.com/>)
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**Instruction:** Write the SQL statement to retrieve the data from the database as provided.

1. Show all rows and all columns from table 'lv1\_tracks' without any condition and let MySQL use default sorting for the result.

**Description:** Show all rows and all columns from table 'lv1\_tracks' without any condition and let MySQL use default sorting for the result.

**Hint:**

- Suggested query: mysql query all rows and columns of a table.
- This will query all rows and all columns from a table.

**Answer:** `SELECT *`  
`FROM lv1_tracks;`

2. Show first 10 rows of data from table 'lv1\_tracks'.

**Description:** Show first 10 rows and all columns from table 'lv1\_tracks' without any condition and let MySQL use default sorting for the result.

**Hint:**

- Suggested query: mysql query first n rows of a table.
- This will query first 10 rows and all columns from a table.

**Answer:** `SELECT *`  
`FROM lv1_tracks`  
`LIMIT 10;`

3. Show only columns of 'name', 'album' and 'artist' of all data from table 'lv1\_tracks'.

**Description:** Show all rows and only columns of 'name', 'album' and 'artist' from table 'lv1\_tracks' without any condition and let MySQL use default sorting for the result.

**Hint:**

- Suggested query: mysql query only specific columns of a table
- This will query all rows and specific columns from a table.

```
Answer: SELECT name, album, artist
          FROM lv1_tracks;
```

4. Show only columns of 'name', 'album' and 'artist' of first 10 rows from table 'lv1\_tracks'.

**Description:** Show first 10 rows and only columns of 'name', 'album' and 'artist' from table 'lv1\_tracks' without any condition and let MySQL use default sorting for the result.

**Hint:**

- This will query all rows and specific columns from a table.

```
Answer: SELECT name, album, artist
          FROM lv1_tracks
          LIMIT 10;
```

5. Show all data from table 'lv1\_tracks' sorted by 'name' in ascending order.

**Description:** Show all rows and all columns from table 'lv1\_tracks' without any condition and sort the result by 'name' in ascending order.

**Hint:**

- Suggested query: mysql query all rows and columns of a table and sort by one column.
- This will query all rows and all columns from a table and sort the result by 'name' in ascending order.

```
Answer: SELECT *
          FROM lv1_tracks
          ORDER BY name ASC;
```

6. Show all data from table 'lv1\_tracks' sorted by 'name' in descending order.

**Description:** Show all rows and all columns from table 'lv1\_tracks' without any condition and sort the result by 'name' in descending order.

**Hint:**

- Suggested query: mysql query all rows and columns of a table and sort by one column.
- This will query all rows and all columns from a table and sort the result by 'name' in descending order.

```
Answer: SELECT *
          FROM lv1_tracks
          ORDER BY name DESC;
```

7. Show all data from table 'lv1\_tracks' sorted by 'name' in ascending order.

**Description:** Show all rows and all columns from table 'lv1\_tracks' without any condition and sort the result by 'name' in ascending order.

**Hint:**

- Suggested query: mysql query all rows and columns of a table and sort by multiple columns.
- This will query all rows and all columns from a table and sort the result by 'name' in ascending order.

**Answer:**

```
SELECT *  
  
FROM lv1_tracks  
  
ORDER BY name ASC;
```

8. Show all data from table 'lv1\_tracks' sorted by 'name' in descending order.

**Description:** Show all rows and all columns from table 'lv1\_tracks' without any condition and sort the result by 'name' in descending order.

**Hint:**

- Suggested query: mysql query all rows and columns of a table and sort by multiple columns.
- This will query all rows and all columns from a table and sort the result by 'name' in descending order.

**Answer:**

```
SELECT *  
  
FROM lv1_tracks  
  
ORDER BY name DESC;
```

9. Show all data from table 'lv1\_tracks' of first 10 rows that sorted by 'name' in descending order.

**Description:** Show all rows and all columns from table 'lv1\_tracks' without any condition and sort the result by 'name' in descending order.

**Hint:**

- Suggested query: mysql query all rows and columns of a table and sort by multiple columns.
- This will query all rows and all columns of first 10 rows from a table and sort the result by 'name' in descending order.

**Answer:**

```
SELECT *  
  
FROM lv1_tracks  
  
ORDER BY name DESC  
  
LIMIT 10;
```

10. Show all data from table 'lv1\_tracks' that duration is greater than 200000.

**Description:** Show all rows and all columns from table 'lv1\_tracks' without any condition and sort the result by 'name' in descending order.

**Hint:**

- Suggested query: mysql query all rows and columns of a table and sort by multiple columns.
- This will query all rows and all columns that duration is greater than 200000.

**Answer:**

```
SELECT *  
FROM lv1_tracks  
WHERE duration > 200000;
```

11. Show all data from table 'lv1\_tracks' that duration is greater than 200000 and sort by 'name' in ascending order.

**Description:** Show all rows and all columns from table 'lv1\_tracks' without any condition and sort the result by 'name' in descending order.

**Hint:**

- Suggested query: mysql query all rows and columns of a table and sort by multiple columns.
- This will query all rows and all columns that duration is greater than 200000 and sort by 'name' in ascending order.

**Answer:**

```
SELECT *  
FROM lv1_tracks  
WHERE duration > 200000  
ORDER BY name ASC;
```

12. Show all data from table 'lv1\_tracks' that duration is greater than 200000 and duration is less than 300000.

**Description:** Show all rows and all columns from table 'lv1\_tracks' that duration is greater than 200000 and duration is less than 300000.

**Hint:**

- Suggested query: mysql query all rows and columns of a table and sort by multiple columns.
- This will query all rows and all columns that duration is greater than 200000 and duration is less than 300000.

**Answer:**

```
SELECT *  
FROM lv1_tracks  
WHERE duration > 200000 AND duration < 300000;
```

13. Show all data from table 'lv1\_tracks' that duration is greater than 200000 and duration is less than 300000 and sort by 'name' in ascending order.

**Description:** Show all rows and all columns from table 'lv1\_tracks' that duration is greater than 200000 and duration is less than 300000 and sort by 'name' in ascending order.

**Hint:**

- Suggested query: mysql query all rows and columns of a table and sort by multiple columns.
- This will query all rows and all columns that duration is greater than 200000 and duration is less than 300000 and sort by 'name' in ascending order.

**Answer:**

```
SELECT *  
FROM lv1_tracks  
WHERE duration > 200000 AND duration < 300000  
ORDER BY name ASC;
```

14. Show all data from table 'lv1\_tracks' that duration is greater than 280000 and duration is less than 300000 and sort by 'name' in descending order.

**Description:** Show all rows and all columns from table 'lv1\_tracks' that duration is greater than 280000 and duration is less than 300000 and sort by 'name' in descending order.

**Hint:**

- Suggested query: mysql query all rows and columns of a table and sort by multiple columns.
- This will query all rows and all columns that duration is greater than 280000 and duration is less than 300000 and sort by 'name' in descending order.

**Answer:**

```
SELECT *  
FROM lv1_tracks  
WHERE duration > 280000 AND duration < 300000  
ORDER BY name DESC;
```

15. Show all data from table 'lv1\_tracks' that duration is greater than 280000 and duration is less than 300000 and sort by 'name' in descending order and limit to 10 rows.

**Description:** Show all rows and all columns from table 'lv1\_tracks' that duration is greater than 280000 and duration is less than 300000 and sort by 'name' in descending order and limit to 10 rows.

**Hint:**

- Suggested query: mysql query all rows and columns of a table and sort by multiple columns.
- This will query all rows and all columns that duration is greater than 280000 and duration is less than 300000 and sort by 'name' in descending order and limit to 10 rows.

**Answer:**

```
SELECT *  
  
FROM lv1_tracks  
  
WHERE duration > 280000 AND duration < 300000  
  
ORDER BY name DESC LIMIT 10;
```

16. Show all data from table 'lv1\_tracks' that duration is greater than 280000 and duration is less than 300000 and sort by 'name' in descending order and limit to 10 rows and offset to 5 rows.

**Description:** Show all rows and all columns from table 'lv1\_tracks' that duration is greater than 280000 and duration is less than 300000 and release year is 2000.

**Hint:**

- Suggested query: mysql query all rows and columns of a table and sort by multiple columns.
- This will query all rows and all columns that duration is greater than 280000 and duration is less than 300000 and release year is 2000.

**Answer:**

```
SELECT *  
  
FROM lv1_tracks  
  
WHERE duration > 280000 AND duration < 300000 AND year =  
2000;
```

17. Show all data from table 'lv1\_tracks' that popularity is greater than or equal 40 and explicit is 1.

**Description:** Show all rows and all columns from table 'lv1\_tracks' that popularity is greater than or equal 40 and explicit is 1.

**Hint:**

- Suggested query: mysql query all rows and columns of a table and sort by multiple columns.
- This will query all rows and all columns that popularity is greater than or equal 40 and explicit is 1.

**Answer:**

```
SELECT *  
  
FROM lv1_tracks  
  
WHERE popularity >= 40 AND explicit = 1;
```

**End of In-class Exercise**