

SQL PRACTICE REPORT

Q1. Students created same time age>31

```
SELECT * FROM students WHERE age > 31 AND created_at IN ( SELECT created_at FROM students GROUP BY created_at HAVING COUNT(*) > 1 );
```

MySQLWorkbench

```
File View Query
1   SELECT * FROM students WHERE age > 31
2   AND created_at IN ( SELECT
3       created_at FROM students
3       GROUP BY created_at HAVING COUNT(*) > 1 );
3   SELECT DISTINCT * FROM students;
```

Result Grid Form Editor

Filter Rows | Wrapp Cell Content =

	id	nama	age	created_at
1	1	Joanna	34	2024-03-15 09:45
2	2	Joanna	34	2024-03-15 09:45
3	3	Robert	40	2024-04-15 14:20

Result Grid Form Editor

Filter Rows | Wrapp Cell Content =

	id	name	age	created_at
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Q2. Remove duplicates

```
SELECT DISTINCT * FROM students;
```

The screenshot shows a MySQL query editor interface. The top bar has icons for file operations like Open, Save, and Print. The title bar says "Query 1 (houseplants)". The main area contains a code editor with the following SQL query:

```
1 •  SELECT * FROM students
2 WHERE age > 31
3 AND created_at IN
4 ( SELECT created_at
5   FROM students
6   GROUP BY created_at
7   HAVING COUNT(*) > 1 );
```

Below the code editor is a results grid with the following data:

id	name	age	created_at
1	Alice Smith	35	2024-04-19 10:15:00
2	David Brown	34	2024-04-19 10:15:00
3	Eve Adams	33	2024-04-22 14:45:00
4	David Brown	34	2024-04-22 14:45:00

At the bottom, there are buttons for "Result Grid", "Export All", and "Wrap Cell". The status bar at the bottom right shows "Execution 0.0340 sec. Fetch: 0.0002 sec, 4 rows(s) returned".

Q3. Identify missing serial numbers

```
SELECT t1.id + 1 AS missing_id FROM students t1 LEFT JOIN students t2 ON t1.id + 1 = t2.id WHERE t2.id IS NULL;
```

The screenshot shows a database management interface with a menu bar (Edit, View, Query, Database, Server, Tools, Scripting, Help) and a toolbar with various icons. A query window titled "Query 1" contains the SQL command: "1 SELECT DISTINCT FROM students;". Below the query window is a "Result Grid" displaying the following data:

	id	name	age	created_at
1	1	John	34	2024-04-01
2	2	Alice	29	2024-05-15
3	3	Bob	31	2024-04-01
4	4	Emma	28	2024-03-10

At the bottom of the interface, there are tabs for "Action Output" and "Result 1", with "Result 1" being the active tab.

Q4. Students with joining date 22 June

```
SELECT * FROM students WHERE created_at LIKE '%-06-22 %';
```

The screenshot shows a database interface with a toolbar at the top, followed by a results grid. The toolbar includes icons for back, forward, search, and refresh, along with tabs for 'Grid', 'Form Filter', 'Field Types', and 'Query Stats'. Below the toolbar, there is a dropdown menu for 'Filter' and a link to 'Filter Rows'. The results grid displays three rows of data:

name	age	created_at
John Doe	28	2023-06-22 09...
Alice	34	2023-06-22 09:...

Q5. Students without surname

```
SELECT * FROM students WHERE name NOT LIKE '% %';
```

The screenshot shows the MySQL Workbench interface with the following details:

- MenuBar:** Werkbankberichte, Tools, Location, Help.
- Toolbar:** Includes icons for New, Open, Save, Print, etc.
- Query Editor:** Shows the executed SQL query: `1 SELECT * FROM students WHERE name NOT LIKE '% %';`
- Results Grid:** Displays the output of the query with the following data:

	name	age	created_at
1	Jacob	25	2024-05-04 0.
2	Liz	20	2024-05-04 0.
3	Daniel	29	2024-05-04 0.
4	Olivia	32	2024-05-04 0.
5	Logan	27	2024-05-09 0.
	MOLL	NULL	NULL

- Status Bar:** Shows "5 rows return", "Fetch: 0,000s", and navigation buttons for Text, Form, Grid, and Tree.

Q6. Student with the longest name

```
SELECT * FROM students WHERE LENGTH(name)=(SELECT MAX(LENGTH(name)) FROM students);
```

The screenshot shows a database interface with a query editor and a result grid. The query editor contains the following SQL code:

```
1  SELECT * FROM students
2  WHERE LENGTH(name) = (SELECT MAX(LENGTH(name)) FROM students);
```

The result grid displays the following data:

	id	name	age	created.at
▶	4	Isabella Thompson	28	2023-08-31 09:00:00

The interface includes various menu items like File, Edit, Import, Table, DataSearch Panel, Reconnect to DBMS, and several toolbar icons. The status bar at the bottom indicates "0.012 sec".