

Worksheet – SQL Fundamentals

Module: SQL Fundamentals

Duration: 90 minutes

Level: Beginner

Target group: Deaf youth learning about data and coding

Part 1: Warm-up (Understanding the Basics)

1. Match the word with the meaning

Word

1. SQL
2. Database
3. Table
4. Row (Record)
5. Column (Field)
6. SELECT

Meaning

- A. One entry in a table (for example: one book, one customer)
- B. A named property of each row (for example: Title, Price, City)
- C. A language used to talk to (communicate with) databases
- D. A collection of related data arranged in rows and columns
- E. Get/read data from a table
- F. An organised store of information (like a digital filing cabinet)

Write your answers (1–6):

1 → ____ , 2 → ____ , 3 → ____ , 4 → ____ , 5 → ____ , 6 → ____

2. Circle the correct answer

People use **SQL** mainly to:

- A. Draw pictures and design apps
- B. Store and work with data in databases
- C. Edit videos

Answer: _____

Part 2 — Practice: “Command Match” Activity

Look at the real-life tasks in the left column.

Decide which **SQL command** you would use: **SELECT**, **INSERT**, **UPDATE**, **DELETE**.

#	Real-life task	SQL command (write SELECT / INSERT / UPDATE / DELETE)
1	You want to see all books that are “Fiction” in the Books table.	
2	You want to add a new customer into the Customers table.	
3	You want to change the email of one customer.	
4	You want to remove all books older than the year 2000 from the list.	
5	You want to see only customers who live in “Athens”.	

Choose one of the tasks (1–5) and explain in simple words what you want the database to do:

I chose task number _____.

I want the database to: _____

Part 3 — Practice: “Query Detective”

Below is a small **Books** table.

BookID	Title	Category	Year	Price
1	SQL Basics	Fiction	2015	10.00
2	Web Design 101	Non-Fic.	2018	18.50
3	Deaf Heroes	Non-Fic.	2020	12.00
4	AI Adventures	Fiction	2022	15.00
5	Old Stories	Fiction	1995	7.50

Fill in the blanks with the **correct keyword**:
(choices: SELECT, FROM, WHERE, ORDER BY)

1. To see **all** books:

_____ * _____ Books;

2. To see only the **Title** and **Price** of all books:

_____ Title, Price _____ Books;

3. To see all **Fiction** books:

SELECT * FROM Books _____ Category = 'Fiction';

4. To see all books, ordered from **cheapest** to **most expensive**:

SELECT * FROM Books _____ Price ASC;

Now answer in words (no code):

Which book has the **lowest price**?

Answer: _____

Which books were published **after 2018**?

Answer: _____

Part 4 — Apply Your Knowledge: “My Mini-Database”

Imagine you are making a small **database** about something you like:

Choose one:

- ☐ My favourite movies
- ☐ My friends
- ☐ My games / apps
- ☐ My school subjects
- ☐ Other: _____

1. What could be the **name of your table**?

Table name: _____

2. Choose **3 columns (fields)** for your table.

Example: Title, Year, Rating

- Column 1: _____
- Column 2: _____
- Column 3: _____

3. Add **one example row (record)**:

Column 1 value	Column 2 value	Column 3 value

4. In words:

- What would you **SELECT** from this table?

(For example: “I want to see all my games with rating 5.”)

Part 5 — Quick Quiz

Tick (✓) the correct answer in each question.

1. Which SQL command **retrieves (reads) data** from a table?
☐ INSERT ☐ UPDATE ☐ SELECT ☐ DELETE
 2. Which part of a query **filters** rows that meet a condition (for example, Category = 'Fiction')?
☐ ORDER BY ☐ WHERE ☐ VALUES ☐ FROM
 3. What is the **safest habit** before running an UPDATE or DELETE?
☐ Remove the WHERE clause
☐ Run a preview SELECT
☐ Sort by name
☐ Always use * in SELECT
 4. Which statement **adds** a new row?
☐ UPDATE ☐ INSERT ☐ SELECT ☐ DELETE
 5. What does **ORDER BY** do?
☐ Filters rows
☐ Sorts results
☐ Adds a row
☐ Deletes rows
-

Part 6 — Reflection

Answer with short phrases or sentences.

1. What did you learn about **SQL** today?

2. What was **difficult** for you?

3. Where could you use **databases and SQL** in your life or schoolwork?

Teacher's Note

This worksheet follows the “SQL Fundamentals” module:

- Use **visual aids** (tables on slides or printed cards) while learners fill in the worksheet.
- For Parts 2–3, you can optionally use an **online SQL editor** (like Programiz) so learners can see real query results after they plan them on paper.
- Emphasise the **safe cycle**: *Preview with SELECT → Change (INSERT/UPDATE/DELETE) → Verify with SELECT again.*