

Week-01 (Organizing data to begin analysis)

* Analysis:

The process used to make sense of the data collected.

→ The goal of analysis is to identify trends and relationships within data so that someone can accurately answer the question that are asking.

→ The four phases of analysis:

1. Organize data.
2. Format and adjust data.
3. Get input from others.
4. Transform data.

Week-02 (Formatting and Adjusting data)

* Data Validation:

1. Add dropdown lists with predetermined options.
2. Create custom checkbox.
3. Protect structured data and formulas.

Week-03 (Aggregating data for Analysis)

* Data aggregation:

The process of gathering data from multiple source to combine it into a single summarized collection.

→ Data aggregation usecase:

1. Identify trends.
2. Make comparisons.
3. Gain Insights.

* Before VLOOKUP:

Need to check 3 things:-

- ① Convert Number from string (for numeric).
- ② Trim the text (for text data).
- ③ Remove duplicate rows.

* SQL JOINS:

A SQL clause that is used to combine rows from two or more tables based on a related column.

→ Four common types of join:

- | | |
|---------|----------|
| ① Inner | ③ Right. |
| ② Left | ④ Outer. |

* COUNT in SQL:

A query that returns the number of rows in a specific range.

* COUNT DISTINCT:

A query that only return the distinct values in a specific range.

* Aliasing:

~ is temporarily naming a table or column in the query to make it easier to read and write.

* SUB QUERY:

A SQL query that is nested inside a larger query.

Week-04 (Performing Data Calculation)

* Data validation process includes:

- ① Completeness.
- ② Accurate.
- ③ secure.
- ④ consistence.

* Temporary table:

A database table that is created and exist temporarily on a database server.

→ Create temporary table:

- ① WITH CLAUSE.
- ② SELECT INTO statement.
- ③ CREATE table statement.