Similarities:

Excel and MySQL are data management solutions using similar data model. Both of them are building on the concept of tables, rows, and columns (samples shown below). In Excel, we could see spreadsheets and edit data directly on tables. In MySQL, we could select data from designated files and make inquiries to get specific calculations.

Contrasts:

The differences would be easily found from the first glance of their interface. Excel is more user-friendly. It doesn’t require coding skills to get started. It built-in better visibility functions such as conditional formatting. But it is not convenient to edit data cross tables, not even tabs. MySQL, on the other hand, an advanced programmatic access system, could join multiple tables easily. MySQL allows users to gather data from different files. It also allows multiple users to collaborate on single SQL files with traceable coding input.

Excel is better for smaller data filling. For example, the daily sales record for a grocery store. It’ll be much easier for a retailer to enter all the information directly to an excel sheet. MySQL would be more suitable for a bigger dataset. For example, the daily sales records of a chain supermarket. In this case, using a scales well database system would be more maintainable.

The last but not the least, Excel require all data to be standard. But MySQL could absorb both numerable data and non-standard data from all different files.

A screenshot of a cell phone

Description automatically generated

*Figure 1*. Excel vs. MySQL

Reference: A. Hershy (2019). *Excel vs SQL: A Conceptual Comparison*. Retrieved from https://towardsdatascience.com/excel-vs-sql-a-conceptual-comparison-dcfbee640c83