ETL

Extract, Transform, Load (ETL)

- Define the Extract, Transform, Load process or ETL process. Explain the correct order of ETL functions. Write a simple ETL program. Have you ever wondered how data was collected from multiple sources and combined to become a single source of information? **This type of data collection is called Batch processing**, and today we will be exploring a type of batch processing called Extract, Transform, and Load. Extract, Transform, and Load (ETL) does exactly what the name implies. It is the process of extracting large amounts of data from multiple sources and formats and transforming it into one specific format before loading it into a database or target file.

- ETL is like preparing a delicious meal from different ingredients. First, you **extract** the ingredients from various places, like a grocery store or your pantry. This is similar to gathering data from different sources, such as CSV files or JSON files. Next, you **transform** those ingredients by chopping, cooking, or mixing them to make them ready for the dish. In the ETL process, this means changing the data into a specific format that your system can understand, like converting height from inches to meters. Finally, you **load** the finished meal onto a plate, which is like putting the transformed data into a database or a target file.

⇒So, in summary, ETL is all about collecting data from different sources, changing it into the right format, and then storing it in one place for easy access.