

## Task 1:

A **Flat File System** stores data in a simple, single file such as a text file or spreadsheet. Each line in the file usually represents a record, and the fields are separated by commas or tabs.

A Relational Database organizes data into tables with rows and columns. Each table is related to others using keys, such as primary and foreign keys.

### Flat File Systems vs. Relational Databases:

Feature	Flat File System	Relational Database
Structure	Stores data in a single file like CSV or text; no relations between data.	Stores data in multiple related tables using rows and columns.
Data Redundancy	High redundancy – same data repeated in multiple files.	Low redundancy – data stored once and referenced using keys.
Relationships	No relationships between data records.	Supports relationships (one-to-one, one-to-many, many-to-many).
Example Usage	Simple logs, Excel sheets, configuration files.	Banking systems, HR systems, e-commerce platforms.
Drawbacks	Hard to update or maintain; prone to inconsistencies.	Requires setup and maintenance but ensures consistency and scalability.