



DATA STORE

TYPES OF DATA STORE

1. Relational Database

- A relational database stores data in tables comprised of rows and columns. Each table is linked to the others using main and foreign keys.
- **Example:**



2. NoSQL Database

- NoSQL databases are created to store unstructured or semi-structured data, such as documents, graphs, and key-value pairs.
- **Example:**



3. Data Warehouse

- A data warehouse is a big, central repository that holds data from several sources for analysis and reporting. It is commonly used in Business Intelligence (BI) to assist firms in making data-driven choices using historical data.
- **Example:**



4. Cloud Storage

- Modern data storage has transitioned to cloud-based platforms. Allow consumers to safely store their info online and access it from anywhere.
- **Example**



MAIN FUNCTIONS OF A DATA STORE

1. Permanent Data Storage

- Ensures that data is available even when the system is shut off or restarted.

2. Data Access and Management

- enables users and programs to rapidly retrieve, insert, update, and remove data.

3. Data Analysis and Reporting

- Provides a foundation for data analytics, allowing organizations to make informed business decisions

4. System Integration

- Enables smooth data exchange between different systems or applications.

IMPORTANCE OF DATA STORES IN WEB APPLICATIONS

- A social media website stores posts, comments, and likes in a database.
- An online shopping site stores user accounts, product information, and order history.
- A university portal stores student records, grades, and course materials.