- Hierarchical Database Management Systems (HDBMS): HDBMSs are organized in a tree-like structure, with each record having one parent and multiple children. These types of databases are used primarily in legacy systems.
- Network Database Management Systems (NDBMS): NDBMSs are similar to HDBMSs, but allow for multiple parent-child relationships between records.
- Object-Oriented Database Management Systems (OODBMS): OODBMSs store data as objects, which can be grouped into classes and subclasses. This type of DBMS is used primarily in object-oriented programming languages.
- Document-Oriented Database Management Systems (DDBMS): DDBMSs store data as documents, such as XML or JSON, rather than as rows and columns. This type of DBMS is commonly used in NoSQL databases.

DBMSs are critical for maintaining the integrity, security, and performance of data. They also provide users with advanced features such as data backup, recovery, and reporting.

1.2 Problem Statement

An inventory management system provides an overview of a company's inventory levels, including information on the quantity of goods on hand. A problem statement for an inventory management report might include issues such as:

- Difficulty in accurately tracking inventory levels: Without an efficient system for tracking inventory, it can be difficult to know how much of a particular product is on hand and when to order more.
- Inefficient use of resources: Without accurate inventory data, it may be difficult to determine which products are selling well and which are not, leading to wasted resources on slow-moving items.
- Stockouts and overstocking: Without an accurate inventory management system, it is easy for a business to run out of stock or overstock items, leading to lost sales and wasted resources respectively.
- Lack of visibility into inventory movement: Without detailed inventory tracking and reporting, it can be difficult to understand how products are moving through the supply chain, making it difficult to identify and address bottlenecks or other issues that may be affecting inventory levels.
- Difficulty in forecasting demand: Without accurate inventory data, it can be difficult to forecast demand for products, making it hard to plan production and purchasing.