Task 1:

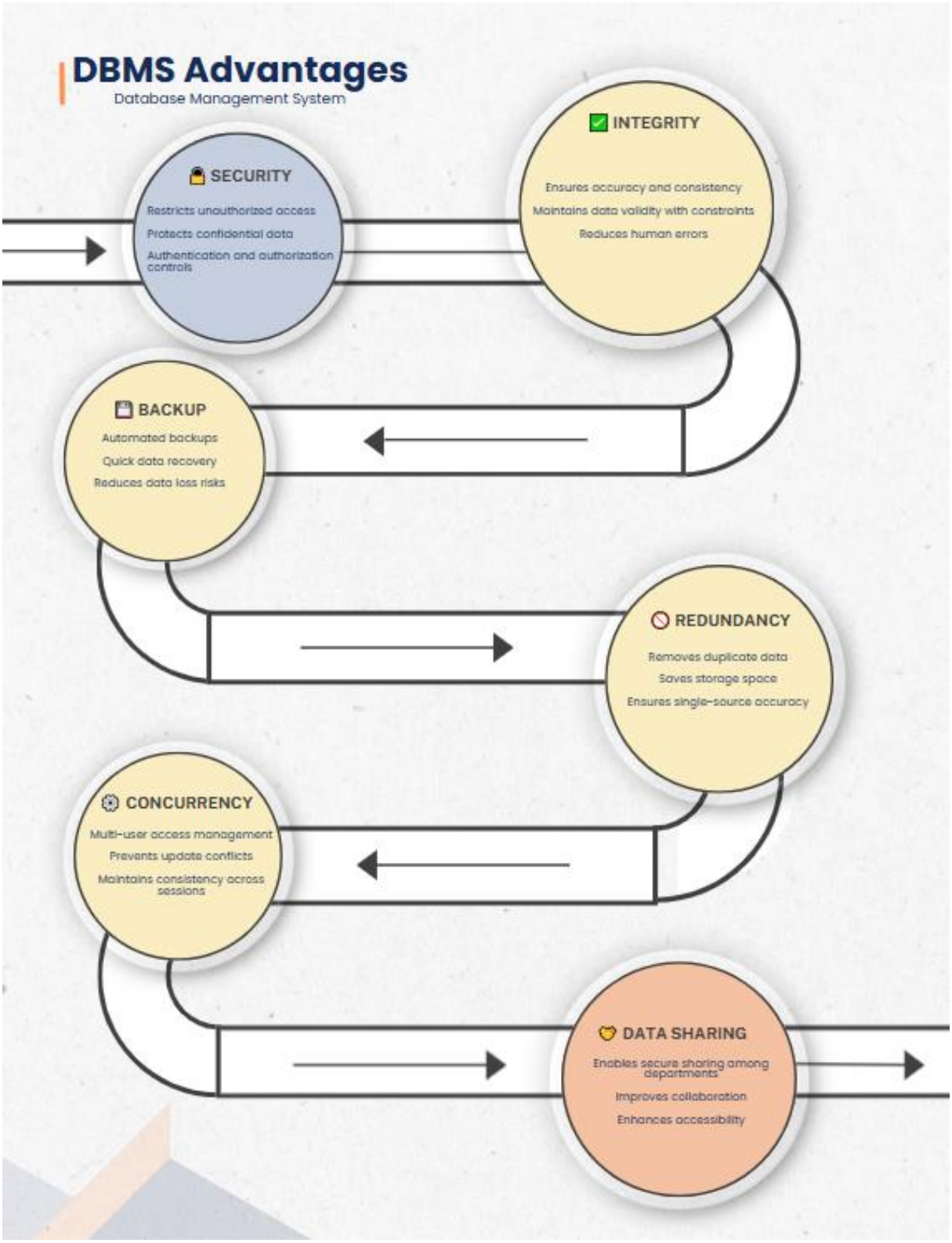
A **Flat File System** stores data in a simple, single file such as a text file or spreadsheet. Each line in the file usually represents a record, and the fields are separated by commas or tabs.

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.

Task 2:


DBMS Advantages
Database Management System
SECURITY
Restricts unauthorized access
Protects confidential data
Authentication and authorization controls
INTEGRITY
Ensures accuracy and consistency
Maintains data validity with constraints
Reduces human errors
BACKUP
Automated backups
Quick data recovery
Reduces data loss risks
REDUNDANCY
Removes duplicate data
Saves storage space
Ensures single-source accuracy
CONCURRENCY
Multi-user access management
Prevents update conflicts
Maintains consistency across sessions
DATA SHARING
Enables secure sharing among departments
Improves collaboration
Enhances accessibility