Database Search and Reporting Task

1. Comparison Assignment

Create a comparison between Flat File Systems and Relational Databases

	Flat File Systems	Relational Databases
Structure	is a simple file that contains a single table of data, with no relationships between tables	is a type of database that organizes data into one or more tables, with each table consisting of a set of rows and columns. Each table has a unique key that can be used to establish relationships with other tables
Redundancy	• high redundancy: the same data may be replicated in different files • Results in inefficiencies and inconsistencies.	• No redundancy: data is stored only once. • Ensures consistency and avoids duplication
Relationships	Limited support for complex relationships	Supports complex relationships between data
Example usage	For example, SQL, which is a standard interface, is a popular type of Relational Database.	For example, a CSV file is the most mutual type of Flat File Database.
	• Limited Functionality: The realm of data exploration often demands more than meets the eye	• Complexity: The architecture of a city demands intricate design, much like databases. • Overhead: In the grandeur of database

| Drawbacks | • Data Integrity
• Scalability: The canvas of data is ever-expanding. Flat files, however, stand at the base camp, unable to scale the heights of managing large or rapidly growing datasets. They falter in accommodating the data deluge. | management, there exists an undercurrent of resource consumption. The engines driving databases introduce a certain overhead, which can subtly impact the resources available for other tasks;
• Cost: Like grand palaces, databases often come at a cost. |