

## Task # 1: Database

**Note: use AI for solutions, For extra Marks.**

*Create a database system that can store and manage information for a large-scale international sports tournament, with multiple events and participants across various countries. The database should be able to handle complex queries and provide real-time updates.*

*Requirements:*

*The database should include tables for storing information about the events, participants, venues, and schedules.*

*Each event should have a unique identifier and include information about the date, time, location, and type of sport.*

*Each participant should have a unique identifier and include information about their name, nationality, age, and gender.*

*Each venue should have a unique identifier and include information about the name, location, and capacity.*

*The database should be able to handle updates to the schedule in real-time, including changes to the date, time, and location of events.*

*The database should be able to generate reports, including lists of participants, schedules for each event, and overall standings for each sport.*

*The database should be able to handle complex queries, such as finding all events scheduled for a specific date, or all participants from a specific country.*

*The database should be designed to handle a large volume of data, with efficient storage and retrieval mechanisms.*

*Note: Participants can participate in multiple events, and events can have multiple participants. A participant's performance in each event should be recorded in the database, including their score and ranking.*

*This task will require students to design and implement a complex database system with multiple tables and relationships, as well as handle real-time updates and complex queries. It will also require them to consider efficient storage and retrieval mechanisms to handle a large volume of data.*

*Note: Attached Script & backup file of the database and the attached notepad file with queries.*