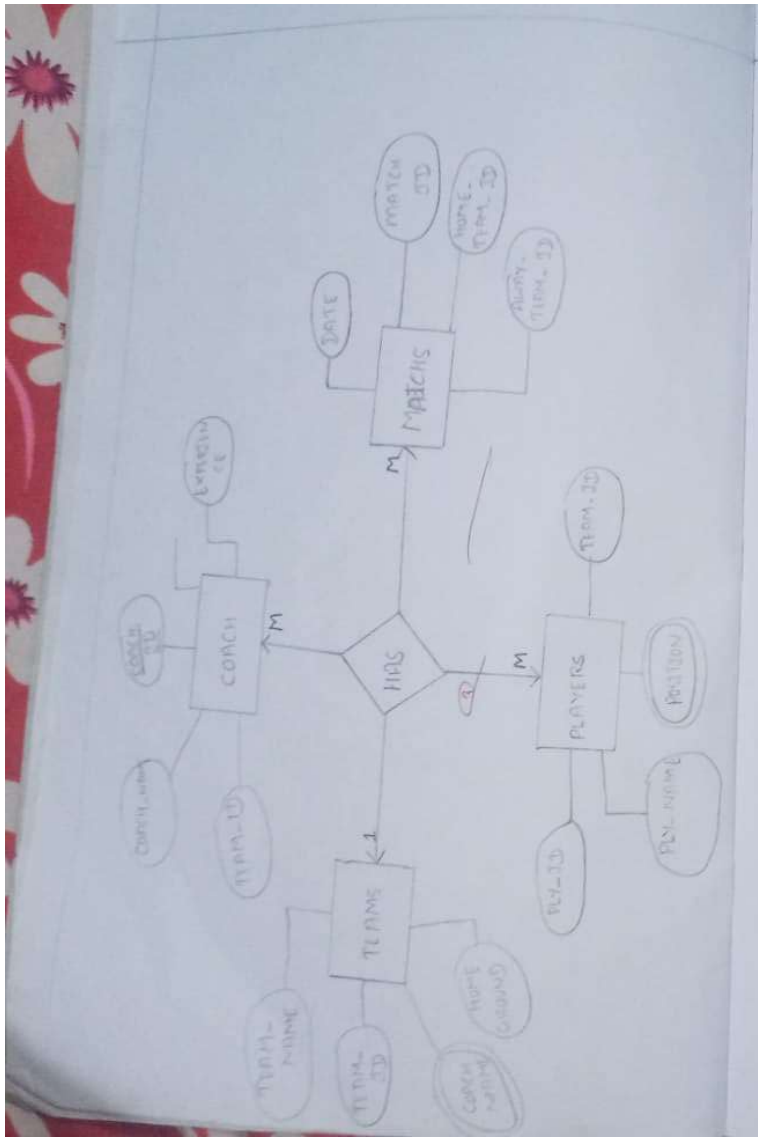

Task (1) Date

TITLE :- Conceptual Design Using ER model - Sports Event Management System.

AIM :- To make Conceptual Design using ER model - Sports Event Management System.

Tools Required :-

Use any of the following ER diagram tools:

- https://draw.io
- https://erdplus.com
- Creately

Steps Involved in Creating ER Diagram :-

Step 1 :- Problem Understanding & Requirement Analysis

Analyze the real-world application: Sports Event Management System.

Understand the domain:

- Teams
- Coaches
- Players
- Matches

Step 2 :- Identify Major Entities

The major entities identified in the ER diagrams are:

- Teams
- Coach
- Players
- matches

Step 3 :- Identify Attributes for Each Entity

Entity	Attributes
Teams	Team_ID (PK), Team_Name, Home_Ground, Coach_Name
Coach	Coach_NAME, Coach_ID, Experience, Team_ID

Input for the ER Design :-

- Real-time sports Event Scenario.
- User Requirements (Team Registration, Player listing, Match scheduling, Scoring System).
- Database Design Rules (Entity - Attribute - Relationship structure)

OUTPUT :-

The Entity Relationship Diagram (ERD) must show:

- All major entities with attributes.
- All relationships with correct cardinality.
- Keys (PK, FK) properly marked.
- Clear layout with logical grouping.

Players — Ply_ID (PK), Ply_Name, Position, Team_ID (FK)

Matches — ~~Match_ID~~ Date, ~~Score~~, Ground, Home_Team_ID, Away_Team_ID

Step 4 :- Define Relationships between Entities

- A team has many Players
- A team has many Coaches
- A team participates in many Matches (as Home / Away team)
- A Coach belongs to one Team.
- A player belongs to one Team.
- A match has one Score record.
- A match is played between two Teams.

Step 5 :- Draw ER Diagram using draw.io

- Use rectangles for Entities (e.g., Teams, players)
- Use ellipses for Attributes.
- Use diamonds for Relationships (e.g., HAS, PLAYS)
- Connect entities using solid lines.
- Indicate :
  - (1:M), (M:N) Cardinalities
  - Primary keys (underlined or marked)
  - Foreign keys
  - Composite.
- Use double ellipse for multivalued attributes if needed.

RESULT :- The Sports Event Management System database has successfully designed using an ER model and it identifies entities like Teams, Players, Coach and Matches, their attributes and relationships.

VEL TECH	
EX NO.	1
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	5
RECORD (5)	5
TOTAL (20)	15
SIGN WITH DATE	

Team No - 2.1
Date :- 5/8/25

Conversion of ER Diagram into Relational Model

Aim :- To convert ER diagram to Relational Model.

ALGORITHM :- Steps for Converting the ER diagram to the table.

- Entity type becomes a table.
- All single-valued attributes becomes a Column.
- A key attribute of the entity type represented by the primary key.
- The multivalued attribute is represented by a seperate table.
- Composite attribute represented by components.
- Derived attributes are not considered in the table.

VEL TECH	
EX NO.	1
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	5
RECORD (5)	5
TOTAL (20)	20
SIGN WITH DATE	

9/12/25

RESULT :- To Conversion of ER Diagram into Relational Model is implemented Sucessfully.