### LAB-1

# 1. Identify a domain of your choice and describe it in detail for 100 words.

**Sports management system** refers to software or a set of tools used to manage various aspects of a sports organization or team, including player and team performance tracking, game scheduling, financial management, marketing and communications, and other administrative tasks. It can also include features such as online registration and payment processing, facility and equipment scheduling, and volunteer and staff management. The aim of a sports management system is to streamline operations, improve efficiency and productivity, and provide valuable insights and data for decision-making.

#### 2. Mention 10 entities:

- Team: A group of players who compete against other teams in a sport.
- Player: An individual who participates in a sport as a member of a team.
- League: A group of teams who compete against each other in a sport.
- Game: A competitive event between two teams in a sport.
- Venue: A location where a game takes place.
- Fan: An individual who supports a team or league.
- Coach: An individual who trains and leads a team.
- Standing: A record of a team's win-loss record in a league.
- Injury: A physical condition that affects a player's ability to participate in a sport.
- Performance Statistics: Data that measures the performance of a team or player in a sport, such as win/loss record, goals scored, assists, etc.

#### 2. Mention 10 attributes:

- Name: The name of a player, team, league, game, venue, or other entity.
- Date: The date and time of a game or other event.
- Location: The physical location of a game or other event.
- Status: The current state of a game or other event, such as scheduled, in progress, or completed.
- Record: A team or player's win-loss record.
- Statistics: Detailed data about the performance of a team or player in a sport.
- Capacity: The maximum number of individuals who can attend a game or event at a venue.
- Price: The cost of a ticket or other product or service.
- Type: The classification of a product or service, such as a ticket, membership, or sponsorship.
- Description: A text description of a product, service, or entity, including details such as game rules, player positions, and sponsorship benefits.

## 3. Assign data type for each attribute with proper justification.

Name: stringDate: date

Location: string

• Status: string

Record: stringStatistics: string

• Statistics, string

Capacity: IntPrice: Float

Type: string

• Description: string

# 4. Write down the expected outcome on the basis of what type of application are you going to design.

- Improved efficiency and organization
- Improved customer experience
- Better data-driven decision making
- Enhanced communication and collaboration