JSS MAHAVIDYAPEETA

JSS SCIENCE AND TECHNOLOGY UNIVERSITY

SRI JAYACHAMARAJENDRA COLLEGE OF ENGINEERING

MYSURU-570006

SUBJECT NAME: DATABASE MANAGEMENT SYSTEM

(20CS510) Event – 1

REPORT ON:

"SPORTS CLUB MANAGEMENT SYSTEM"

SUBMITTED BY

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CERTIFICATE

This is to certify that the work entitled "SPORTS CLUB MANAGEMENT SYSTEM" is a bonafied work carried out by Mohith Gowda K., Prashanth M., M V Nagavardhan Vasist.,Kiran R and Sharath HK in partial fulfillment of the award of the degree of Bachelor of Engineering in Computer Science and Engineering of JSS Science and Technology, Mysuru during the year 2023. It is certified that all corrections / suggestions indicated during CIE have been incorporated in the report. The mini project report has been approved as it satisfies the academic requirements in respect of mini project work for event 1 prescribed for the Database Management Systems (20CS510) course.

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Place: MYSURU

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1. INTRODUCTION
1.1 OBJECTIVE OF THE PROJECT

The main objective of the sports club management system project is to develop a robust and efficient database management system that can effectively handle the various aspects of managing a sports club. This includes managing member details such as personal information, membership status, and payment records, as well as handling sports event schedules, team management, and equipment inventory.

In order to achieve this objective, the system will be designed to streamline and automate the administrative processes of the sports club, reducing manual work and improving overall efficiency. This will be done by providing an intuitive user interface for easy data entry, retrieval, and update.

The system will be capable of managing member details, enabling club administrators to easily access and update information such as personal profiles, contact details, and membership status. It will also handle payment records and generate invoices or reminders to ensure timely collection of dues.

Furthermore, the system will include features to manage sports event schedules. Administrators will be able to create and update event details, including location, date, time, and participants. This will enable efficient planning and coordination of events, ensuring smooth execution and participation.

Team management will also be a key component of the system. Club administrators will have the ability to manage team rosters, assign coaches or team leaders, and track player performance and attendance. This will facilitate effective team management and improve overall performance.

Lastly, the system will incorporate inventory management capabilities to keep track of sports equipment and supplies. Administrators will be able to maintain a comprehensive inventory record, including details such as item name, quantity, and condition. This will help ensure that the club has sufficient equipment for practices and events, and allow for timely replacement or repairs when needed.

Overall, the objective of the sports club management system project is to create a reliable and user-friendly database management system that enhances the overall experience of managing and participating in the sports club. The system will automate administrative tasks, streamline operations, and provide accurate and timely information to both club administrators and members. By achieving these objectives, the sports club management system will contribute to the efficient and successful functioning of the sports club.

1.2 FEATURES OF THE PROJECT

A sports club management system in a Database Management System (DBMS) should include a range of features to effectively manage and streamline the various aspects of running a sports club. Here are some key features that can be included in such a project:

1. Member Management:
   - Member registration and profile management.
   - Membership status tracking .
   - Member contact information.
   - Member categories (e.g., player, coach, etc.).

2. Facility
   - Facility booking and scheduling.

3. Financial Management:
   - Membership fee collection and tracking.
   - Sponsorship and fundraising management.
   - Expense tracking and financial reporting.
   - Budget planning and forecasting.

4. User Roles and Access Control:
   - Role-based access control to restrict and manage user privileges.
   - Different user roles (admin, coach, member) with varying levels of access
   - User authentication and security features.

5. Event Registration and Payment:
   - Online event registration for members.
   - Payment processing and tracking.
   - Receipt generation and payment reminders.

2. SYSTEM DESIGN

2.1 ER DIAGRAM -HIGH LEVEL DATA MODELLING

An entity–relationship model (ER model) describes inter-related things of interest in a specific domain of knowledge. An ER model is composed of entity types (which classify the things of interest) and specifies relationships that can exist between instances of those entity types.In software engineering an ER model is commonly formed to represent things that a business needs to remember in order to perform business processes. Consequently, the ER model becomes an abstract data model that defines a data or information structure that can be implemented in a database, typically a relational database.

The database schema of a database system is its structure described in a formal language supported by the database Management System (DBMS). The term "schema" refers to the organization of data as a blueprint of how the database is constructed (divided into database tables in the case of relational databases). The formal definition of a database schema is a set of formulas (sentences) called integrity constraints imposed on a database.
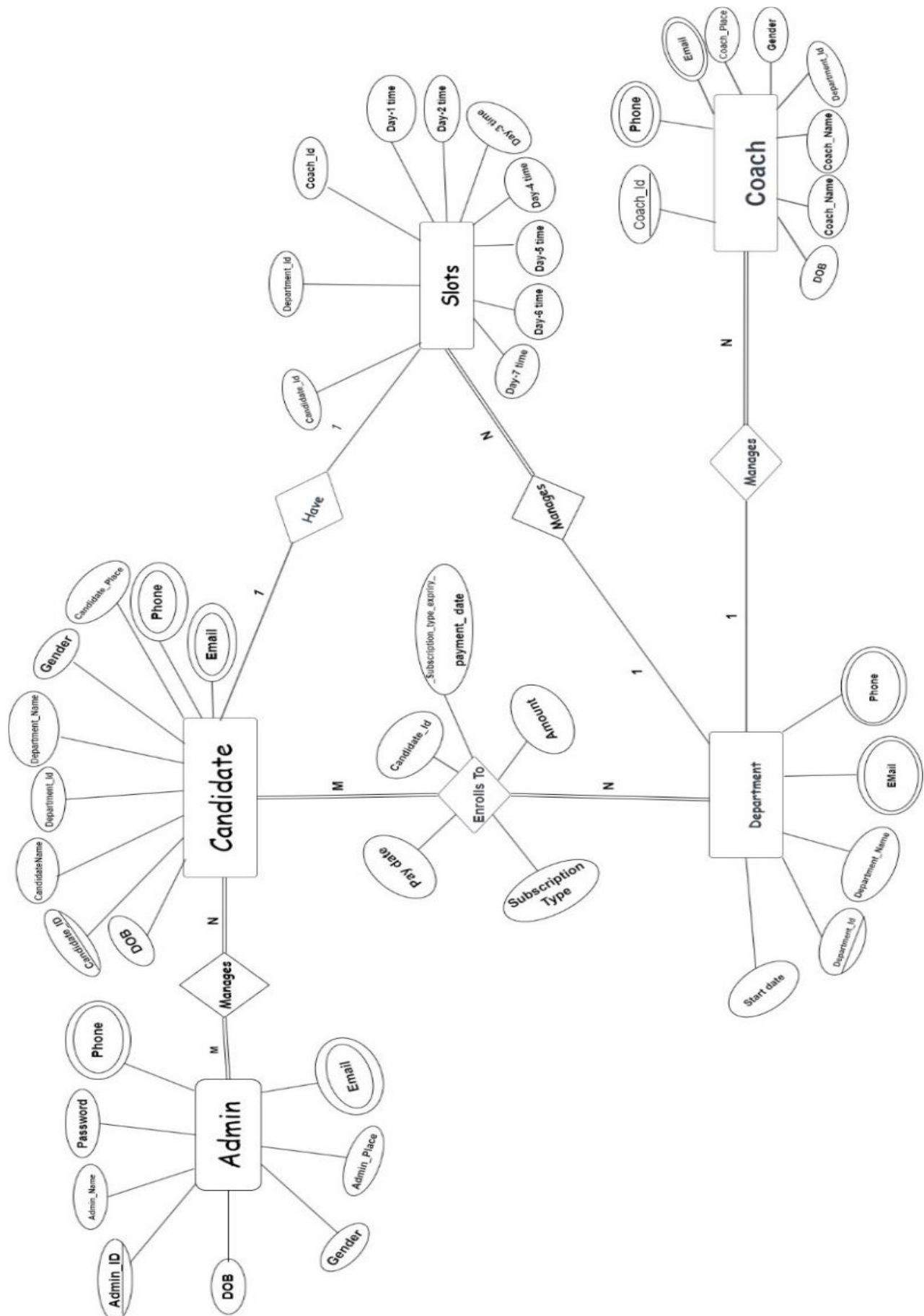
2.2 SCHEMA DIAGRAM
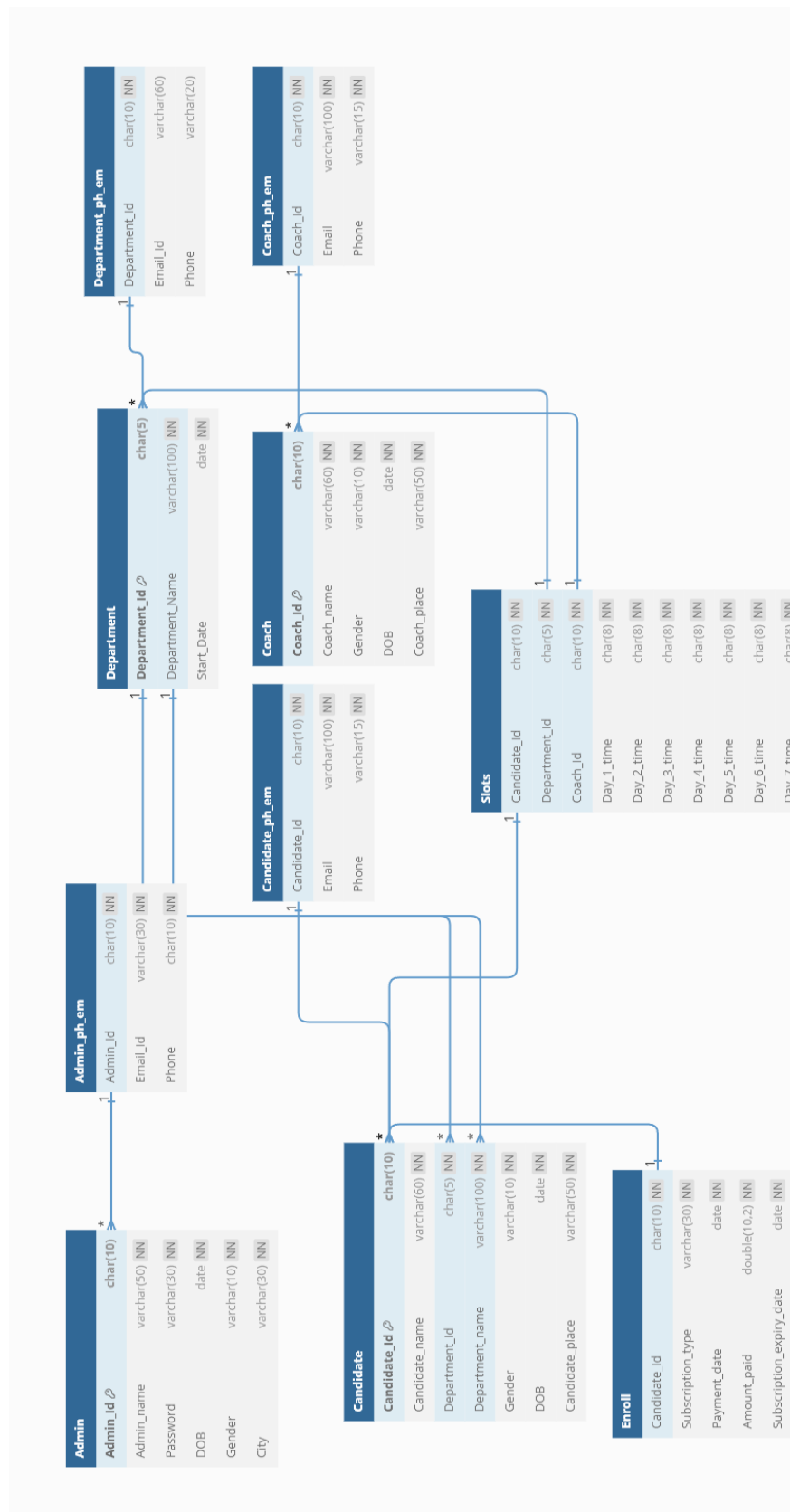
2.3 STATE DIAGRAM
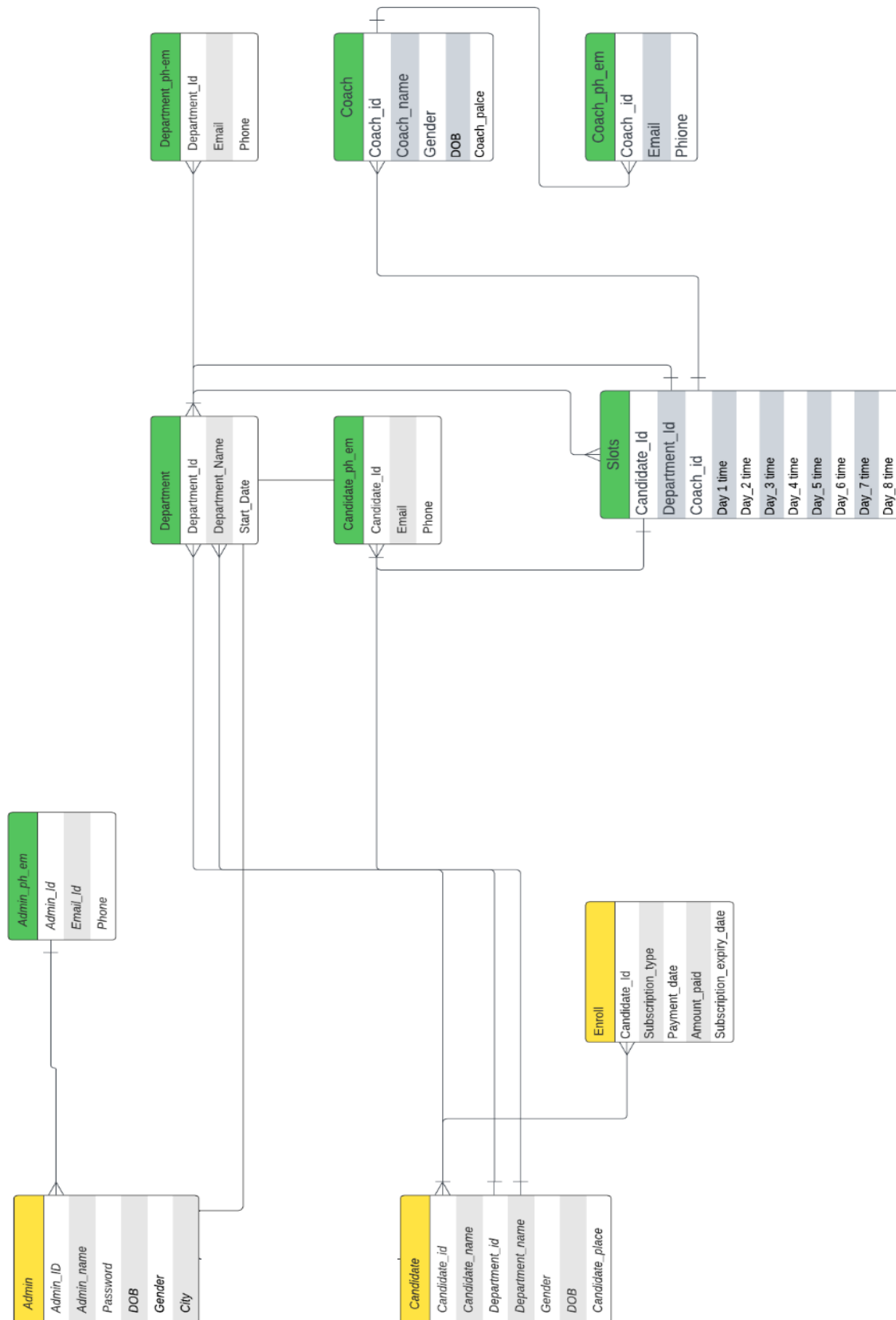
```
mysql> create table Admin(Admin_Id char(10) primary key not null,Admin_name varchar(50) not null,Password varchar(30) unique not null,DOB date not null,Gender varchar(10) not null,City varchar(30) not null);
Query OK, 0 rows affected (0.10 sec)

mysql> select * from Admin;
Empty set (0.01 sec)
```

```
mysql> insert into Admin values("0823AD0001", "KIRAN R", "Kiran@2663", "2002-11-23", "MALE", "MYSURU");
Query OK, 1 row affected (0.27 sec)

mysql> insert into Admin values("0823AD0002", "M V NAGAVARDHAN VASIST", "Vardhan@3866", "2002-05-13", "MALE", "MALAVALLI");
Query OK, 1 row affected (0.02 sec)

mysql> insert into Admin values("0823AD0003", "MOHITH GOWDA K", "Mohith@0707", "2003-05-11", "MALE", "MYSURU");
Query OK, 1 row affected (0.03 sec)

mysql> insert into Admin values("0823AD0004", "PRASHANTH M", "Prashanth@2410", "2003-10-24", "MALE", "MYSURU");
Query OK, 1 row affected (0.01 sec)

mysql> insert into Admin values("0823AD0005", "SHARATH H K", "Sharath@2003", "2003-05-03", "MALE", "MYSURU");
Query OK, 1 row affected (0.08 sec)

mysql> select * from Admin;
+------------+------------------------+----------------+------------+--------+-----------+
| Admin_Id   | Admin_name             | Password       | DOB        | Gender | City      |
+------------+------------------------+----------------+------------+--------+-----------+
| 0823AD0001 | KIRAN R                | Kiran@2663     | 2002-11-23 | MALE   | MYSURU    |
| 0823AD0002 | M V NAGAVARDHAN VASIST | Vardhan@3866   | 2002-05-13 | MALE   | MALAVALLI |
| 0823AD0003 | MOHITH GOWDA K         | Mohith@0707    | 2003-05-11 | MALE   | MYSURU    |
| 0823AD0004 | PRASHANTH M            | Prashanth@2410 | 2003-10-24 | MALE   | MYSURU    |
| 0823AD0005 | SHARATH H K            | Sharath@2003   | 2003-05-03 | MALE   | MYSURU    |
+------------+------------------------+----------------+------------+--------+-----------+
5 rows in set (0.00 sec)
```

```
mysql> create table Department(Department_Id char(5) primary key not null, Department_Name varchar(100) unique not null, Start_Date date not null);
Query OK, 0 rows affected (0.15 sec)

mysql> select * from Department;
Empty set (0.00 sec)
```

```
mysql> insert into Department values("D0001", "Department of Football","2023-01-15");
Query OK, 1 row affected (0.02 sec)

mysql> insert into Department values("D0002", "Department of Cricket","2023-01-15");
Query OK, 1 row affected (0.04 sec)

mysql> insert into Department values("D0003", "Department of Volleyball","2023-01-16");
Query OK, 1 row affected (0.02 sec)

mysql> insert into Department values("D0004", "Department of Basketball","2023-01-16");
Query OK, 1 row affected (0.03 sec)

mysql> insert into Department values("D0005", "Department of Olympic-Weightlifting","2023-01-17");
Query OK, 1 row affected (0.01 sec)

mysql> insert into Department values("D0006", "Department of Powerlifting","2023-01-17");
Query OK, 1 row affected (0.03 sec)

mysql> insert into Department values("D0007", "Department of Best-Physique","2023-01-17");
Query OK, 1 row affected (0.01 sec)

mysql> insert into Department values("D0008", "Department of Badminton","2023-01-18");
Query OK, 1 row affected (0.01 sec)

mysql> insert into Department values("D0009", "Department of Tennis","2023-01-18");
Query OK, 1 row affected (0.03 sec)

mysql> insert into Department values("D0010", "Department of Kabaddi","2023-01-18");
Query OK, 1 row affected (0.03 sec)

mysql> select * from Department;
+---------------+-------------------------------------+------------+
| Department_Id | Department_Name                     | Start_Date |
+---------------+-------------------------------------+------------+
| D0001         | Department of Football              | 2023-01-15 |
| D0002         | Department of Cricket               | 2023-01-15 |
| D0003         | Department of Volleyball            | 2023-01-16 |
| D0004         | Department of Basketball            | 2023-01-16 |
| D0005         | Department of Olympic-Weightlifting | 2023-01-17 |
| D0006         | Department of Powerlifting          | 2023-01-17 |
| D0007         | Department of Best-Physique         | 2023-01-17 |
| D0008         | Department of Badminton             | 2023-01-18 |
| D0009         | Department of Tennis                | 2023-01-18 |
| D0010         | Department of Kabaddi               | 2023-01-18 |
+---------------+-------------------------------------+------------+
10 rows in set (0.00 sec)
```

```
mysql> create table Coach(Coach_Id char(10) primary key not null, Coach_name varchar(60) not null, Gender varchar(10) not null, DOB date not null, Coach_place varchar(50)
 not null);
Query OK, 0 rows affected (0.20 sec)

mysql> select * from Coach;
Empty set (0.01 sec)
```

```
mysql> INSERT INTO Coach VALUES
    ->      ('0928CCK001', 'Rajesh Sharma', 'Male', '1980-10-28', 'Delhi'),
    ->      ('1018CCK002', 'Preeti Patel', 'Female', '1985-10-28', 'Mumbai'),
    ->      ('0228CVB001', 'Amit Kumar', 'Male', '1980-10-28', 'Kolkata'),
    ->      ('1021CVB002', 'Sneha Gupta', 'Female', '1985-10-28', 'Chennai'),
    ->      ('1020CTN001', 'Sanjay Singh', 'Male', '1980-10-28', 'Bengaluru'),
    ->      ('1014CTN002', 'Meera Joshi', 'Female', '1985-10-28', 'Hyderabad'),
    ->      ('0528CBT001', 'Kunal Verma', 'Male', '1980-10-28', 'Pune'),
    ->      ('0921CBT002', 'Rita Sharma', 'Female', '1985-10-28', 'Ahmedabad'),
    ->      ('0828CPL001', 'Ramesh Kumar', 'Male', '1980-10-28', 'Jaipur'),
    ->      ('0714CPL002', 'Neha Patel', 'Female', '1985-10-28', 'Lucknow'),
    ->      ('1028COL001', 'Vikas Singh', 'Male', '1980-10-28', 'Bhopal'),
    ->      ('0612COL002', 'Divya Mehta', 'Female', '1985-10-28', 'Chandigarh'),
    ->      ('1028CKB001', 'Mukesh Verma', 'Male', '1980-10-28', 'Coimbatore'),
    ->      ('0815CKB002', 'Sarita Singh', 'Female', '1985-10-28', 'Indore'),
    ->      ('1028CBP001', 'Rajat Sharma', 'Male', '1980-10-28', 'Nagpur'),
    ->      ('1014CBP002', 'Nisha Gupta', 'Female', '1985-10-28', 'Surat'),
    ->      ('1028CFT001', 'Arvind Patel', 'Male', '1980-10-28', 'Trivandrum'),
    ->      ('0914CFT002', 'Anjali Sharma', 'Female', '1985-10-28', 'Visakhapatnam'),
    ->      ('1121CBB001', 'Amith Shah', 'Male', '1980-10-28', 'Trivandrum'),
    ->      ('0914CBB002', 'Jay Shah', 'Male', '1985-10-28', 'Visakhapatnam');
Query OK, 20 rows affected (0.02 sec)
Records: 20  Duplicates: 0  Warnings: 0

mysql> select * from Coach;
+------------+---------------+--------+------------+---------------+
| Coach_Id   | Coach_name    | Gender | DOB        | Coach_place   |
+------------+---------------+--------+------------+---------------+
| 0228CVB001 | Amit Kumar    | Male   | 1980-10-28 | Kolkata       |
| 0528CBT001 | Kunal Verma   | Male   | 1980-10-28 | Pune          |
| 0612COL002 | Divya Mehta   | Female | 1985-10-28 | Chandigarh    |
| 0714CPL002 | Neha Patel    | Female | 1985-10-28 | Lucknow       |
| 0815CKB002 | Sarita Singh  | Female | 1985-10-28 | Indore        |
| 0828CPL001 | Ramesh Kumar  | Male   | 1980-10-28 | Jaipur        |
| 0914CBB002 | Jay Shah      | Male   | 1985-10-28 | Visakhapatnam |
| 0914CFT002 | Anjali Sharma | Female | 1985-10-28 | Visakhapatnam |
| 0921CBT002 | Rita Sharma   | Female | 1985-10-28 | Ahmedabad     |
| 0928CCK001 | Rajesh Sharma | Male   | 1980-10-28 | Delhi         |
| 1014CBP002 | Nisha Gupta   | Female | 1985-10-28 | Surat         |
| 1014CTN002 | Meera Joshi   | Female | 1985-10-28 | Hyderabad     |
| 1018CCK002 | Preeti Patel  | Female | 1985-10-28 | Mumbai        |
| 1020CTN001 | Sanjay Singh  | Male   | 1980-10-28 | Bengaluru     |
| 1021CVB002 | Sneha Gupta   | Female | 1985-10-28 | Chennai       |
| 1028CBP001 | Rajat Sharma  | Male   | 1980-10-28 | Nagpur        |
| 1028CFT001 | Arvind Patel  | Male   | 1980-10-28 | Trivandrum    |
| 1028CKB001 | Mukesh Verma  | Male   | 1980-10-28 | Coimbatore    |
| 1028COL001 | Vikas Singh   | Male   | 1980-10-28 | Bhopal        |
| 1121CBB001 | Amith Shah    | Male   | 1980-10-28 | Trivandrum    |
+------------+---------------+--------+------------+---------------+
20 rows in set (0.00 sec)
```

3. SYSTEM IMPLEMENTATION

3.1 INTRODUCTION TO MYSQL/DBMS

A)MySQL:

- MySQL, an open-source relational database Management System (RDBMS), is primarily coded in C and C++. While its SQL parser is crafted using yacc, it employs a proprietary lexical analyzer. Operating seamlessly on various system platforms like Linux, macOS, Microsoft Windows, and NetBSD, MySQL is offered in two distinct editions: the open-source MySQL Community Server and the proprietary Enterprise Server.

- The MySQL Enterprise Server sets itself apart through a set of exclusive extensions that function as server plugins, although it shares the same version numbering system and is constructed from the same code base as the Community Server. Among its prominent features are a comprehensive subset of ANSI SQL 99, with added extensions, cross-platform support, support for stored procedures using a procedural language closely aligned with SQL/PSM, triggers, cursors, updatable views, and online DDL when utilizing the InnoDB Storage Engine.

- Numerous programming languages offer specific APIs and libraries for interfacing with MySQL databases. For instance, there's MySQL Connector/Net designed for integration with Microsoft's Visual Studio, as well as the JDBC driver for Java. Moreover, an ODBC interface known as MySQL Connector/ODBC facilitates communication between MySQL databases and additional programming languages that support the ODBC interface, such as ASP or ColdFusion.

B)DBMS:

- DBMS, an abbreviation for Database Management System, is a robust software application that enables users to interact with a database. It serves as an intermediary between the database and the end-user, as well as between the database and other applications, ensuring data is organized, easily accessible, and effectively managed.

- Written predominantly in C and C++, some DBMS systems utilize specific languages for their core functionalities. Their internal mechanisms, such as query processing and optimization, are often tailored to efficiently handle the complexities of data retrieval and storage. Furthermore, DBMS systems typically employ a range of algorithms and data structures to ensure speedy data access and manipulation.

- DBMS systems operate on various platforms, including Linux, macOS, Microsoft Windows, and others. Some DBMS systems come in different editions, such as open-source community versions and proprietary enterprise editions, each with its distinct features and support options. These different editions cater to the diverse requirements of different user groups, providing flexibility and scalability for both small-scale and enterprise-level database applications.

- Key features of DBMS systems include support for standard database query languages, such as SQL, as well as various extensions that facilitate complex data operations. Additionally, they often support stored procedures, triggers, and views, which allow for efficient data manipulation and access control. Many DBMS systems also provide support for online database schema modifications, ensuring uninterrupted access to the data during structural changes.

- A wide array of programming languages and frameworks provide specific APIs and libraries for interacting with various DBMS systems. These interfaces enable seamless integration with applications developed in different programming languages, enhancing the accessibility and usability of the data stored within the database.

3.2 RELATIONAL ALGEBRAIC QUERIES

UPDATE Coach
SET Department_Id = 'D0001'
WHERE Coach_Id LIKE '%CFT%';

3.3   QUERIES DESIGNED USING SQL COMMANDS

```sql
create database SPORTS_CLUB_MANAGEMENT_SYSTEM;
use SPORTS_CLUB_MANAGEMENT_SYSTEM;

create table Admin(Admin_Id char(10) primary key not null,Admin_name varchar(50) not
null,Password varchar(30) unique not null,DOB date not null,Gender varchar(10) not
null,City varchar(30) not null);

create table Admin_ph_em(Admin_Id char(10) not null,Email_Id varchar(30) not null,Phone
char(10) not null,foreign key(Admin_Id) references Admin(Admin_Id));

insert into Admin values("0823AD0001", "KIRAN R", "Kiran@2663", "2002-11-23", "MALE",
"MYSURU");
insert into Admin values("0823AD0002", "M V NAGAVARDHAN VASIST", "Vardhan@3866", "2002-
05-13", "MALE", "MALAVALLI");
insert into Admin values("0823AD0003", "MOHITH GOWDA K", "Mohith@0707", "2003-05-11",
"MALE", "MYSURU");
insert into Admin values("0823AD0004", "PRASHANTH M", "Prashanth@2410", "2003-10-24",
"MALE", "MYSURU");
insert into Admin values("0823AD0005", "SHARATH H K", "Sharath@2003", "2003-05-03",
"MALE", "MYSURU");

insert into Admin_ph_em values('0823AD0001', 'kiran@gmail.com', '1234567890');
insert      into     Admin_ph_em     values('0823AD0002',      'vasist@gmail.com',
'9999999999'),('0823AD0003',     'Mohith@gmail.com',     '2222222222'),('0823AD0004',
'Prashanth@gmail.com', '3333333333'),('0823AD0005', 'Sharath@gmail.com', '4444444444');
insert      into     Admin_ph_em     values('0823AD0003',      'Mohith1@gmail.com',
'6666666666'),('0823AD0001', 'kiran2@gmail.com', '11111
11111'),('0823AD0001', 'kiran3@gmail.com', '5555555555');

ALTER TABLE Admin_ph_em
    -> MODIFY Phone char(10),
    -> MODIFY Email_Id varchar(30);
insert into Admin_ph_em values("0823AD0004", "Prashanth2@gmail.com","");
update Admin_ph_em set Phone="-" where Email_id="kiran3@gmail.com";
update Admin_ph_em set Phone="-" where Email_id="Prashanth2@gmail.com";

SELECT  Admin.Admin_Id,  Admin.Admin_name,  Admin.Password,  Admin.DOB,  Admin.Gender,
Admin.City, Admin_ph_em.Email_Id, Admin_ph_em.Phone
    -> FROM Admin
    -> LEFT JOIN Admin_ph_em ON Admin.Admin_Id = Admin_ph_em.Admin_Id;




create table Department(Department_Id char(5) primary key not null, Department_Name
varchar(100) unique not null, Start_Date date not null);
create table Department_ph_em(Department_Id char(10) not null,Email_Id varchar(60),Phone
varchar(20),foreign key(Department_Id) references Department(Department_Id));
```

```sql
insert into Department values("D0001", "Department of Football","2023-01-15");
insert into Department values("D0002", "Department of Cricket","2023-01-15");
insert into Department values("D0003", "Department of Volleyball","2023-01-16");
insert into Department values("D0004", "Department of Basketball","2023-01-16");
insert into Department values("D0005", "Department of Olympic-Weightlifting","2023-01-17");
insert into Department values("D0006", "Department of Powerlifting","2023-01-17");
insert into Department values("D0007", "Department of Best-Physique","2023-01-17");
insert into Department values("D0008", "Department of Badminton","2023-01-18");
insert into Department values("D0009", "Department of Tennis","2023-01-18");
insert into Department values("D0010", "Department of Kabaddi","2023-01-18");


INSERT INTO Department_ph_em VALUES('D0001', 'football@gmail.com', '821-456-7890'),
('D0001','footballmaintenance@gmail.com', '987-654-3210'), ('D0001',
'managerfootball@gmail.com', '456-789-0123'), ('D001',
'supportfootball@gmail.com','789-012-3456');
INSERT INTO Department_ph_em VALUES('D0002', 'cricket@gmail.com', '111-222-
3333'),('D0002', 'cricketmaintenance@gmail.com', '444-555-6666'),('D0002',
'managercricket@gmail.com', '777-888-9999'),('D0002', 'supportcricket@gmail.com', '123-
456-7890');
INSERT INTO Department_ph_em VALUES ('D0003', 'volleyball@gmail.com', '222-333-4444'),
('D0003', 'volleyballmaintenance@gmail.com', '555-666-7777'), ('D0003',
'managervolleyball@gmail.com', '888-999-0000'), ('D0003',
'supportvolleyball@gmail.com', '234-567-8901');
INSERT INTO Department_ph_em VALUES('D0004', 'basketball@gmail.com', '333-444-
5555'),('D0004', 'basketballmaintenance@gmail.com', '666-777-8888'),('D0004',
'managerbasketball@gmail.com', '999-000-1111'),('D0004', 'supportbasketball@gmail.com',
'345-456-5678');
INSERT INTO Department_ph_em VALUES('D0005', 'weightlifting@gmail.com', '444-555-
6666'),('D0005', 'weightliftingmaintenance@gmail.com', '777-888-9999'),('D0005',
'managerweightlifting@gmail.com', '111-222-3333'),('D0005',
'supportweightlifting@gmail.com', '456-567-6789');
INSERT INTO Department_ph_em VALUES('D0006', 'powerlifting@gmail.com', '555-666-
7777'),('D0006', 'powerliftingmaintenance@gmail.com', '888-999-0000'),('D0006',
'managerpowerlifting@gmail.com', '222-333-4444'),('D0006',
'supportpowerlifting@gmail.com', '567-678-7890');
INSERT INTO Department_ph_em VALUES('D0007', 'bestphysique@gmail.com', '666-777-
8888'),('D0007', 'bestphysiquemaintenance@gmail.com', '999-000-1111'),('D0007',
'managerbestphysique@gmail.com', '333-444-5555'),('D0007',
'supportbestphysique@gmail.com', '678-789-8901');
INSERT INTO Department_ph_em VALUES('D0008', 'badminton@gmail.com', '777-888-
9999'),('D0008', 'badmintonmaintenance@gmail.com', '111-222-3333'),('D0008',
'managerbadminton@gmail.com', '444-555-6666'),('D0008', 'supportbadminton@gmail.com',
'789-890-9012');
INSERT INTO Department_ph_em VALUES('D0009', 'tennis@gmail.com', '888-999-
0000'),('D0009', 'tennismaintenance@gmail.com', '111-222-3333'),('D0009',
'managertennis@gmail.com', '555-666-7777'),('D0009', 'supporttennis@gmail.com', '890-
901-0123');
INSERT INTO Department_ph_em VALUES('D0010', 'kabaddi@gmail.com', '999-000-
1111'),('D0010', 'kabaddimaintenance@gmail.com', '222-333-4444'),('D0010',
'managerkabaddi@gmail.com', '666-777-8888'),('D0010', 'supportkabaddi@gmail.com', '901-
012-1234');


SELECT
    ->      Department.Department_Id,
    ->      Department.Department_Name,
    ->      Department_ph_em.Email_Id,
```

```sql
    ->     Department_ph_em.Phone
    -> FROM Department
    ->     LEFT    JOIN    Department_ph_em    ON    Department.Department_Id    =
Department_ph_em.Department_Id
    -> WHERE Department.Department_Id BETWEEN 'D0001' AND 'D0010'
    -> ORDER BY Department.Department_Id, Department_ph_em.Email_Id;

/*OPTIONAL:

SELECT
    ->     Department.Department_Id,
    ->     Department.Department_Name,
    ->     GROUP_CONCAT(Department_ph_em.Email_Id) AS Email_addresses,
    ->     GROUP_CONCAT(Department_ph_em.Phone) AS Phone_numbers
    -> FROM Department
    ->     LEFT    JOIN    Department_ph_em    ON    Department.Department_Id    =
Department_ph_em.Department_Id
    -> WHERE Department.Department_Id BETWEEN 'D0001' AND 'D0010'
    -> GROUP BY Department.Department_Id
    -> ORDER BY Department.Department_Id;
*/


ALTER TABLE Admin_ph_em
    -> ADD CONSTRAINT Admin_Id
    -> FOREIGN KEY (Admin_Id)
    -> REFERENCES Admin(Admin_Id)
    -> ON DELETE CASCADE;

ALTER TABLE Department_ph_em ADD CONSTRAINT Department_Id FOREIGN KEY (Department_Id)
REFERENCES Department(Department_Id) ON DELETE CASCADE;


create table Candidate(Candidate_Id char(10) primary key not null, Candidate_name
varchar(60) not null, Department_Id char(5) not null, Department_name varchar(100) not
null, Gender varchar(10) not null, DOB date not null, Candidate_place varchar(50) not
null, foreign key (Department_Id) references Department(Department_Id) on delete
cascade, foreign key (Department_Name) references Department(Department_Name) on delete
cascade);

create table Candidate_ph_em(Candidate_Id char(10) not null, Email varchar(100) not
null,  Phone  varchar(15)  not  null,  foreign  key(Candidate_Id)  references
Candidate(Candidate_Id) on delete cascade);

INSERT INTO Candidate VALUES
('0723BP0001', 'Aiden Adams', 'D0007', 'Department of Best-Physique', 'Male', '1990-03-
25', 'Pune'),
('0623BP0002', 'Mike', 'D0007', 'Department of Best-Physique', 'Male', '1992-11-20',
'Hyderabad'),
('0523BP0003', 'Edison', 'D0007', 'Department of Best-Physique', 'Male', '1988-06-10',
'Chennai'),
('0423BP0004', 'Liam Smith', 'D0007', 'Department of Best-Physique', 'Male', '1993-09-
12', 'Delhi'),
('0223BP0005', 'Ethan Wilson', 'D0007', 'Department of Best-Physique', 'Male', '1996-
02-15', 'Mumbai');
INSERT INTO Candidate VALUES
('0621OL0003', 'Aiden Adams', 'D0005', 'Department of Olympic-Weightlifting', 'Male',
'1990-03-25', 'Pune'),
('0617OL0004', 'Mia Lewis', 'D0005', 'Department of Olympic-Weightlifting', 'Female',
'1992-11-20', 'Hyderabad'),
```

```
('0713OL0005', 'Ella Brown', 'D0005', 'Department of Olympic-Weightlifting', 'Female',
'1988-06-10', 'Chennai'),
('0812OL0006', 'Liam Smith', 'D0005', 'Department of Olympic-Weightlifting', 'Male',
'1993-09-12', 'Delhi'),
('0913OL0007', 'Ethan Wilson', 'D0005', 'Department of Olympic-Weightlifting', 'Male',
'1996-02-15', 'Mumbai');
INSERT INTO Candidate VALUES
('0705PL0003', 'Liam Parker', 'D0006', 'Department of Powerlifting', 'Male', '1992-07-
30', 'Kolkata'),
('1019PL0004', 'Ava Turner', 'D0006', 'Department of Powerlifting', 'Female', '1994-05-
18', 'Bangalore'),
('0821PL0005', 'Sophia Hall', 'D0006', 'Department of Powerlifting', 'Female', '1989-
12-05', 'Chandigarh'),
('0523PL0006', 'Ethan Moore', 'D0006', 'Department of Powerlifting', 'Male', '1993-04-
15', 'Jaipur'),
('0623PL0007', 'Mason White', 'D0006', 'Department of Powerlifting', 'Male', '1990-10-
20', 'Lucknow');
INSERT INTO Candidate VALUES
('0723FT0001', 'David Johnson', 'D0001', 'Department of Football', 'Male', '1995-06-
10', 'Chennai'),
('0623FT0002', 'Emily Wilson', 'D0001', 'Department of Football', 'Female', '1997-03-
12', 'Mumbai'),
('0523FT0003', 'Daniel Smith', 'D0001', 'Department of Football', 'Male', '1990-11-25',
'Bangalore'),
('0423FT0004', 'Olivia Taylor', 'D0001', 'Department of Football', 'Female', '1993-09-
05', 'Kolkata'),
('0223FT0005', 'Liam Brown', 'D0001', 'Department of Football', 'Male', '1999-02-15',
'Delhi');
INSERT INTO Candidate VALUES
('0723BM0001', 'Liam Parker', 'D0008', 'Department of Badminton', 'Male', '1992-07-30',
'Kolkata'),
('0623BM0002', 'Ava Turner', 'D0008', 'Department of Badminton', 'Female', '1994-05-
18', 'Bangalore'),
('0523BM0003', 'Sophia Hall', 'D0008', 'Department of Badminton', 'Female', '1989-12-
05', 'Chandigarh'),
('0423BM0004', 'Ethan Moore', 'D0008', 'Department of Badminton', 'Male', '1993-04-15',
'Jaipur'),
('0223BM0005', 'Mason White', 'D0008', 'Department of Badminton', 'Male', '1990-10-20',
'Lucknow');
INSERT INTO Candidate VALUES
('0723TN0001', 'David Johnson', 'D0009', 'Department of Tennis', 'Male', '1995-06-10',
'Chennai'),
('0623TN0002', 'Emily Wilson', 'D0009', 'Department of Tennis', 'Female', '1997-03-12',
'Mumbai'),
('0523TN0003', 'Daniel Smith', 'D0009', 'Department of Tennis', 'Male', '1990-11-25',
'Bangalore'),
('0423TN0004', 'Olivia Taylor', 'D0009', 'Department of Tennis', 'Female', '1993-09-
05', 'Kolkata'),
('0223TN0005', 'Liam Brown', 'D0009', 'Department of Tennis', 'Male', '1999-02-15',
'Delhi');
INSERT INTO Candidate VALUES
('0723KB0001', 'Aiden Adams', 'D0010', 'Department of Kabaddi', 'Male', '1990-03-25',
'Pune'),
('0623KB0002', 'Mia Lewis', 'D0010', 'Department of Kabaddi', 'Female', '1992-11-20',
'Hyderabad'),
('0523KB0003', 'Ella Brown', 'D0010', 'Department of Kabaddi', 'Female', '1988-06-10',
'Chennai'),
('0423KB0004', 'Liam Smith', 'D0010', 'Department of Kabaddi', 'Male', '1993-09-12',
'Delhi'),
```

```
('0223KB0005', 'Ethan Wilson', 'D0010', 'Department of Kabaddi', 'Male', '1996-02-15',
'Mumbai');
INSERT INTO Candidate VALUES
('1022BB0003', 'Liam Clark', 'D0004', 'Department of Basketball', 'Male', '1992-08-05',
'Trivandrum'),
('0321BB0004', 'Emma Moore', 'D0004', 'Department of Basketball', 'Female', '1995-04-
25', 'Indore'),
('0319BB0005', 'Olivia Turner', 'D0004', 'Department of Basketball', 'Female', '1994-
03-10', 'Mysore'),
('0214BB0006', 'Daniel Parker', 'D0004', 'Department of Basketball', 'Male', '1990-09-
15', 'Varanasi'),
('0223BB0007', 'Sophia Scott', 'D0004', 'Department of Basketball', 'Female', '1993-12-
20', 'Bhubaneswar');
INSERT INTO Candidate VALUES
('0722VB0003', 'Ethan Davis', 'D0003', 'Department of Volleyball', 'Male', '1992-05-
20', 'Chandigarh'),
('1021VB0004', 'Sophia White', 'D0003', 'Department of Volleyball', 'Female', '1995-12-
15', 'Jaipur'),
('1019VB0005', 'Mason Evans', 'D0003', 'Department of Volleyball', 'Male', '1989-10-
02', 'Lucknow'),
('0814VB0006', 'Ava Hall', 'D0003', 'Department of Volleyball', 'Female', '1991-11-30',
'Ahmedabad'),
('0904VB0007', 'William Lee', 'D0003', 'Department of Volleyball', 'Male', '1997-07-
18', 'Nagpur');
INSERT INTO Candidate VALUES
('0723CK0003', 'Michael Johnson', 'D0002', 'Department of Cricket', 'Male', '1995-06-
10', 'Chennai'),
('0623CK0004', 'Emma Wilson', 'D0002', 'Department of Cricket', 'Female', '1997-03-12',
'Mumbai'),
('0523CK0005', 'Matthew Smith', 'D0002', 'Department of Cricket', 'Male', '1990-11-25',
'Bangalore'),
('0423CK0006', 'Olivia Taylor', 'D0002', 'Department of Cricket', 'Female', '1993-09-
05', 'Kolkata'),
('0223CK0007', 'Liam Brown', 'D0002', 'Department of Cricket', 'Male', '1999-02-15',
'Delhi');


INSERT INTO Candidate_ph_em VALUES
('0723BP0001', 'aiden@example.com', '123-456-7890'),
('0723BP0001', 'aiden2@example.com', '987-654-3210');
INSERT INTO Candidate_ph_em VALUES
('0623BP0002', 'mike@example.com', '234-567-8901'),
('0623BP0002', 'mike2@example.com', '876-543-2109');
INSERT INTO Candidate_ph_em VALUES
('0523BP0003', 'edison@example.com', '345-678-9012'),
('0523BP0003', 'edison2@example.com', '765-432-1098');
INSERT INTO Candidate_ph_em VALUES
('0423BP0004', 'liam@example.com', '456-789-0123'),
('0423BP0004', 'liam2@example.com', '876-543-2109');
INSERT INTO Candidate_ph_em VALUES
('0223BP0005', 'ethan@example.com', '567-890-1234'),
('0223BP0005', 'ethan2@example.com', '987-654-3210');
INSERT INTO Candidate_ph_em VALUES
('0621OL0003', 'aiden@example.com', '123-456-7890'),
('0621OL0003', 'aiden2@example.com', '987-654-3210');
INSERT INTO Candidate_ph_em VALUES
('0617OL0004', 'mia@example.com', '234-567-8901'),
('0617OL0004', 'mia2@example.com', '876-543-2109');
INSERT INTO Candidate_ph_em VALUES
('0713OL0005', 'ella@example.com', '345-678-9012'),
```

```sql
('0713OL0005', 'ella2@example.com', '765-432-1098');
INSERT INTO Candidate_ph_em VALUES
('0812OL0006', 'liam@example.com', '456-789-0123'),
('0812OL0006', 'liam2@example.com', '876-543-2109');
INSERT INTO Candidate_ph_em VALUES
('0913OL0007', 'ethan@example.com', '567-890-1234'),
('0913OL0007', 'ethan2@example.com', '987-654-3210');
INSERT INTO Candidate_ph_em VALUES
('0705PL0003', 'liam@example.com', '123-456-7890'),
('0705PL0003', 'liam2@example.com', '987-654-3210');
INSERT INTO Candidate_ph_em VALUES
('1019PL0004', 'ava@example.com', '234-567-8901'),
('1019PL0004', 'ava2@example.com', '876-543-2109');
INSERT INTO Candidate_ph_em VALUES
('0821PL0005', 'sophia@example.com', '345-678-9012'),
('0821PL0005', 'sophia2@example.com', '765-432-1098');
INSERT INTO Candidate_ph_em VALUES
('0523PL0006', 'ethan@example.com', '456-789-0123'),
('0523PL0006', 'ethan2@example.com', '876-543-2109');
INSERT INTO Candidate_ph_em VALUES
('0623PL0007', 'mason@example.com', '567-890-1234'),
('0623PL0007', 'mason2@example.com', '987-654-3210');
INSERT INTO Candidate_ph_em VALUES
('0723CK0003', 'michael@example.com', '123-456-7890'),
('0723CK0003', 'michael2@example.com', '987-654-3210');
INSERT INTO Candidate_ph_em VALUES
('0623CK0004', 'emma@example.com', '234-567-8901'),
('0623CK0004', 'emma2@example.com', '876-543-2109');
INSERT INTO Candidate_ph_em VALUES
('0523CK0005', 'matthew@example.com', '345-678-9012'),
('0523CK0005', 'matthew2@example.com', '765-432-1098');
INSERT INTO Candidate_ph_em VALUES
('0423CK0006', 'olivia@example.com', '456-789-0123'),
('0423CK0006', 'olivia2@example.com', '876-543-2109');
INSERT INTO Candidate_ph_em VALUES
('0223CK0007', 'liam@example.com', '567-890-1234'),
('0223CK0007', 'liam2@example.com', '987-654-3210');
INSERT INTO Candidate_ph_em VALUES
('0722VB0003', 'ethan@example.com', '123-456-7890'),
('0722VB0003', 'ethan2@example.com', '987-654-3210'),
('1021VB0004', 'sophia@example.com', '234-567-8901'),
('1021VB0004', 'sophia2@example.com', '876-543-2109'),
('1019VB0005', 'mason@example.com', '345-678-9012'),
('1019VB0005', 'mason2@example.com', '765-432-1098'),
('0814VB0006', 'ava@example.com', '456-789-0123'),
('0814VB0006', 'ava2@example.com', '876-543-2109'),
('0904VB0007', 'william@example.com', '567-890-1234'),
('0904VB0007', 'william2@example.com', '987-654-3210');
INSERT INTO Candidate_ph_em VALUES ('1022BB0003', 'liam@example.com', '123-456-7890'),
('1022BB0003', 'liam2@example.com', '987-654-3210');
INSERT INTO Candidate_ph_em VALUES ('0321BB0004', 'emma@example.com', '234-567-8901'),
('0321BB0004', 'emma2@example.com', '876-543-2109');
INSERT INTO Candidate_ph_em VALUES ('0319BB0005', 'olivia@example.com', '345-678-
9012'), ('0319BB0005', 'olivia2@example.com', '765-432-1098');
INSERT INTO Candidate_ph_em VALUES ('0214BB0006', 'daniel@example.com', '456-789-
0123'), ('0214BB0006', 'daniel2@example.com', '876-543-2109');
INSERT INTO Candidate_ph_em VALUES ('0223BB0007', 'sophia@example.com', '567-890-1234'),
('0223BB0007', 'sophia2@example.com', '987-654-3210');
INSERT INTO Candidate_ph_em VALUES
('0723KB0001', 'aiden@example.com', '123-456-7890'),
```

```sql
('0723KB0001', 'aiden2@example.com', '987-654-3210'),
('0623KB0002', 'mia@example.com', '234-567-8901'),
('0623KB0002', 'mia2@example.com', '876-543-2109'),
('0523KB0003', 'ella@example.com', '345-678-9012'),
('0523KB0003', 'ella2@example.com', '765-432-1098'),
('0423KB0004', 'liam@example.com', '456-789-0123'),
('0423KB0004', 'liam2@example.com', '876-543-2109'),
('0223KB0005', 'ethan@example.com', '567-890-1234'),
('0223KB0005', 'ethan2@example.com', '987-654-3210');
INSERT INTO Candidate_ph_em VALUES
('0723FT0001', 'david@example.com', '123-456-7890'),
('0723FT0001', 'david2@example.com', '987-654-3210'),
('0623FT0002', 'emily@example.com', '234-567-8901'),
('0623FT0002', 'emily2@example.com', '876-543-2109'),
('0523FT0003', 'daniel@example.com', '345-678-9012'),
('0523FT0003', 'daniel2@example.com', '765-432-1098'),
('0423FT0004', 'olivia@example.com', '456-789-0123'),
('0423FT0004', 'olivia2@example.com', '876-543-2109'),
('0223FT0005', 'liam@example.com', '567-890-1234'),
('0223FT0005', 'liam2@example.com', '987-654-3210'),
('0723BM0001', 'liam@example.com', '123-456-7890'),
('0723BM0001', 'liam2@example.com', '987-654-3210'),
('0623BM0002', 'ava@example.com', '234-567-8901'),
('0623BM0002', 'ava2@example.com', '876-543-2109'),
('0523BM0003', 'sophia@example.com', '345-678-9012'),
('0523BM0003', 'sophia2@example.com', '765-432-1098'),
('0423BM0004', 'ethan@example.com', '456-789-0123'),
('0423BM0004', 'ethan2@example.com', '876-543-2109'),
('0223BM0005', 'mason@example.com', '567-890-1234'),
('0223BM0005', 'mason2@example.com', '987-654-3210'),
('0723TN0001', 'david@example.com', '123-456-7890'),
('0723TN0001', 'david2@example.com', '987-654-3210'),
('0623TN0002', 'emily@example.com', '234-567-8901'),
('0623TN0002', 'emily2@example.com', '876-543-2109'),
('0523TN0003', 'daniel@example.com', '345-678-9012'),
('0523TN0003', 'daniel2@example.com', '765-432-1098'),
('0423TN0004', 'olivia@example.com', '456-789-0123'),
('0423TN0004', 'olivia2@example.com', '876-543-2109'),
('0223TN0005', 'liam@example.com', '567-890-1234'),
('0223TN0005', 'liam2@example.com', '987-654-3210');


SELECT
    ->      Candidate.Candidate_Id,
    ->      Candidate.Candidate_Name,
    ->      Candidate.Department_Id,
    ->      Candidate.Department_Name,
    ->      Candidate.Gender,
    ->      Candidate.DOB,
    ->      Candidate.Candidate_place,
    ->      Candidate_ph_em.Email,
    ->      Candidate_ph_em.Phone
    -> FROM Candidate
    ->      LEFT    JOIN    Candidate_ph_em    ON    Candidate.Candidate_Id    =
Candidate_ph_em.Candidate_Id
    -> ORDER BY Candidate.Department_Id;
SELECT               Candidate.Candidate_Id,               Candidate.Candidate_Name,
Candidate.Department_Id,       Candidate.Department_Name,       Candidate.Gender,
Candidate.DOB,        Candidate.Candidate_place,        Candidate_ph_em.Email,
Candidate_ph_em.Phone FROM Candidate LEFT JOIN Candidate_ph_em ON Candidate.Candidate_Id
= Candidate_ph_em.Candidate_Id ORDER BY Candidate.Department_Id;
```

```sql
create table Coach(Coach_Id char(10) primary key not null, Coach_name varchar(60) not
null, Gender varchar(10) not null, DOB date not null, Coach_place varchar(50) not null);

create table Coach_ph_em(Coach_Id char(10) not null, Email varchar(100) not null, Phone
varchar(15) not null, foreign key(Coach_Id) references Coach(Coach_Id) on delete
cascade);

INSERT INTO Coach VALUES
    ('0928CCK001', 'Rajesh Sharma', 'Male', '1980-10-28', 'Delhi'),
    ('1018CCK002', 'Preeti Patel', 'Female', '1985-10-28', 'Mumbai'),
    ('0228CVB001', 'Amit Kumar', 'Male', '1980-10-28', 'Kolkata'),
    ('1021CVB002', 'Sneha Gupta', 'Female', '1985-10-28', 'Chennai'),
    ('1020CTN001', 'Sanjay Singh', 'Male', '1980-10-28', 'Bengaluru'),
    ('1014CTN002', 'Meera Joshi', 'Female', '1985-10-28', 'Hyderabad'),
    ('0528CBT001', 'Kunal Verma', 'Male', '1980-10-28', 'Pune'),
    ('0921CBT002', 'Rita Sharma', 'Female', '1985-10-28', 'Ahmedabad'),
    ('0828CPL001', 'Ramesh Kumar', 'Male', '1980-10-28', 'Jaipur'),
    ('0714CPL002', 'Neha Patel', 'Female', '1985-10-28', 'Lucknow'),
    ('1028COL001', 'Vikas Singh', 'Male', '1980-10-28', 'Bhopal'),
    ('0612COL002', 'Divya Mehta', 'Female', '1985-10-28', 'Chandigarh'),
    ('1028CKB001', 'Mukesh Verma', 'Male', '1980-10-28', 'Coimbatore'),
    ('0815CKB002', 'Sarita Singh', 'Female', '1985-10-28', 'Indore'),
    ('1028CBP001', 'Rajat Sharma', 'Male', '1980-10-28', 'Nagpur'),
    ('1014CBP002', 'Nisha Gupta', 'Female', '1985-10-28', 'Surat'),
    ('1028CFT001', 'Arvind Patel', 'Male', '1980-10-28', 'Trivandrum'),
    ('0914CFT002', 'Anjali Sharma', 'Female', '1985-10-28', 'Visakhapatnam'),
    ('1121CBB001', 'Amith Shah', 'Male', '1980-10-28', 'Trivandrum'),
    ('0914CBB002', 'Jay Shah', 'Male', '1985-10-28', 'Visakhapatnam');

INSERT INTO Coach_ph_em VALUES
    ('0928CCK001', 'rajesh.sharma@gmail.com', '123-456-7890'),
    ('1018CCK002', 'preeti.patel@gmail.com', '987-654-3210'),
    ('0228CVB001', 'amit.kumar@gmail.com', '234-567-8901'),
    ('1021CVB002', 'sneha.gupta@gmail.com', '876-543-2109'),
    ('1020CTN001', 'sanjay.singh@gmail.com', '345-678-9012'),
    ('1014CTN002', 'meera.joshi@gmail.com', '765-432-1098'),
    ('0528CBT001', 'kunal.verma@gmail.com', '456-789-0123'),
    ('0921CBT002', 'rita.sharma@gmail.com', '876-543-2109'),
    ('0828CPL001', 'ramesh.kumar@gmail.com', '567-890-1234'),
    ('0714CPL002', 'neha.patel@gmail.com', '987-654-3210'),
    ('1028COL001', 'vikas.singh@gmail.com', '678-901-2345'),
    ('0612COL002', 'divya.mehta@gmail.com', '876-543-2109'),
    ('1028CKB001', 'mukesh.verma@gmail.com', '789-012-3456'),
    ('0815CKB002', 'sarita.singh@gmail.com', '987-654-3210'),
    ('1028CBP001', 'rajat.sharma@gmail.com', '890-123-4567'),
    ('1028CBP001', 'rajat.sharma2@gmail.com', '891-123-4567'),
    ('1014CBP002', 'nisha.gupta@gmail.com', '987-654-3210'),
    ('1028CFT001', 'arvind.patel@gmail.com', '901-234-5678'),
    ('1028CFT001', 'arvind.patel2@gmail.com', '911-234-5678'),
    ('0914CFT002', 'anjali.sharma@gmail.com', '987-654-3210'),
    ('1121CBB001', 'amith.shah@gmail.com', '123-456-7890'),
    ('0914CBB002', 'jay.shah@gmail.com', '987-654-3210');

ALTER TABLE Coach
ADD Department_Id char(5);
ALTER TABLE Coach
ADD FOREIGN KEY (Department_Id)
```

```sql
REFERENCES Department(Department_Id) on delete cascade;

UPDATE Coach
SET Department_Id = 'D0001'
WHERE Coach_Id LIKE '%CFT%';
UPDATE Coach
SET Department_Id = 'D0002'
WHERE Coach_Id LIKE '%CCK%';
UPDATE Coach
SET Department_Id = 'D0003'
WHERE Coach_Id LIKE '%CVB%';
UPDATE Coach
SET Department_Id = 'D0004'
WHERE Coach_Id LIKE '%CBB%';
UPDATE Coach
SET Department_Id = 'D0005'
WHERE Coach_Id LIKE '%COL%';
UPDATE Coach
SET Department_Id = 'D0006'
WHERE Coach_Id LIKE '%CPL%';
UPDATE Coach
SET Department_Id = 'D0007'
WHERE Coach_Id LIKE '%CBP%';
UPDATE Coach
SET Department_Id = 'D0008'
WHERE Coach_Id LIKE '%CBT%';
UPDATE Coach
SET Department_Id = 'D0009'
WHERE Coach_Id LIKE '%CTN%';
UPDATE Coach
SET Department_Id = 'D0010'
WHERE Coach_Id LIKE '%CKB%';

SELECT
    Coach.Coach_Id,
    Coach.Coach_name,
    Coach.Department_Id,
    Coach.Gender,
    Coach.DOB,
    Coach.Coach_place,
    Coach_ph_em.Email,
    Coach_ph_em.Phone
FROM
    Coach
LEFT JOIN
    Coach_ph_em ON Coach.Coach_Id = Coach_ph_em.Coach_Id
ORDER BY
    Coach.Department_Id;




create table Enroll(Candidate_Id char(10) not null, Subscription_type varchar(30) not
null, Payment_date date not null, Amount_paid double(10,2) not null,
Subscription_expiry_date date not null, foreign key(Candidate_Id) references
Candidate(Candidate_Id) on delete cascade);

INSERT INTO Enroll
VALUES
('0723BP0001', 'Monthly', '2023-10-27', 3500.00, '2023-11-27'),
('0623BP0002', 'Yearly', '2023-10-27', 15000.00, '2024-10-27'),
```

```sql
('0523BP0003', 'Monthly', '2023-10-28', 3500.00, '2023-11-28'),
('0423BP0004', '3 Months', '2023-10-27', 6000.00, '2024-01-27'),
('0223BP0005', 'Half-Yearly', '2023-10-26', 10000.00, '2024-04-26');
INSERT INTO Enroll
VALUES
('0621OL0003', '3 Months', '2023-10-27', 6000.00, '2024-01-27'),
('0617OL0004', 'Half-Yearly', '2023-10-27', 10000.00, '2024-04-27'),
('0713OL0005', 'Monthly', '2023-10-28', 3500.00, '2023-11-28'),
('0812OL0006', '3 Months', '2023-10-27', 6000.00, '2024-01-27'),
('0913OL0007', 'Half-Yearly', '2023-10-26', 10000.00, '2024-04-26');
INSERT INTO Enroll
VALUES
('0705PL0003', '3 Months', '2023-10-27', 6000.00, '2024-01-27'),
('1019PL0004', 'Yearly', '2023-10-27', 15000.00, '2024-10-27'),
('0821PL0005', 'Monthly', '2023-10-28', 3500.00, '2023-11-28'),
('0523PL0006', '3 Months', '2023-10-27', 6000.00, '2024-01-27'),
('0623PL0007', 'Half-Yearly', '2023-10-26', 10000.00, '2024-04-26');
INSERT INTO Enroll
VALUES
('0723FT0001', '3 Months', '2023-10-21', 6000.00, '2024-01-21'),
('0623FT0002', 'Half-Yearly', '2023-10-27', 15000.00, '2024-04-27'),
('0523FT0003', 'Monthly', '2023-10-28', 3500.00, '2023-11-28'),
('0423FT0004', '3 Months', '2023-10-27', 6000.00, '2024-01-27'),
('0223FT0005', 'Half-Yearly', '2023-10-26', 10000.00, '2024-04-26');
INSERT INTO Enroll
VALUES
('0723BM0001', '3 Months', '2023-10-27', 6000.00, '2024-01-27'),
('0623BM0002', 'Half-Yearly', '2023-10-27', 15000.00, '2024-04-27'),
('0523BM0003', 'Monthly', '2023-10-28', 3500.00, '2023-11-28'),
('0423BM0004', '3 Months', '2023-10-27', 6000.00, '2024-01-27'),
('0223BM0005', 'Half-Yearly', '2023-10-26', 10000.00, '2024-04-26');
INSERT INTO Enroll
VALUES
('0723TN0001', '3 Months', '2023-10-27', 6000.00, '2024-01-27'),
('0623TN0002', 'Half-Yearly', '2023-10-27', 15000.00, '2024-04-27'),
('0523TN0003', 'Monthly', '2023-10-28', 3500.00, '2023-11-28'),
('0423TN0004', '3 Months', '2023-10-27', 6000.00, '2024-01-27'),
('0223TN0005', 'Half-Yearly', '2023-10-26', 10000.00, '2024-04-26');
INSERT INTO Enroll
VALUES
('0723KB0001', '3 Months', '2023-10-27', 6000.00, '2024-01-27'),
('0623KB0002', 'Half-Yearly', '2023-10-27', 15000.00, '2024-04-27'),
('0523KB0003', 'Monthly', '2023-10-28', 3500.00, '2023-11-28'),
('0423KB0004', '3 Months', '2023-10-27', 6000.00, '2024-01-27'),
('0223KB0005', 'Half-Yearly', '2023-10-26', 10000.00, '2024-04-26');
INSERT INTO Enroll
VALUES
('1022BB0003', '3 Months', '2023-10-27', 6000.00, '2024-01-27'),
('0321BB0004', 'Half-Yearly', '2023-10-27', 15000.00, '2024-04-27'),
('0319BB0005', 'Monthly', '2023-10-28', 3500.00, '2023-11-28'),
('0214BB0006', '3 Months', '2023-10-27', 6000.00, '2024-01-27'),
('0223BB0007', 'Half-Yearly', '2023-10-26', 10000.00, '2024-04-26');
INSERT INTO Enroll
VALUES
('0722VB0003', '3 Months', '2023-10-27', 6000.00, '2024-01-27'),
('1021VB0004', 'Half-Yearly', '2023-10-27', 15000.00, '2024-04-27'),
('1019VB0005', 'Monthly', '2023-10-28', 3500.00, '2023-11-28'),
('0814VB0006', '3 Months', '2023-10-27', 6000.00, '2024-01-27'),
('0904VB0007', 'Half-Yearly', '2023-10-26', 10000.00, '2024-04-26');
INSERT INTO Enroll
```

```sql
VALUES
('0723CK0003', '3 Months', '2023-10-27', 6000.00, '2024-01-27'),
('0623CK0004', 'Half-Yearly', '2023-10-27', 15000.00, '2024-04-27'),
('0523CK0005', 'Monthly', '2023-10-28', 3500.00, '2023-11-28'),
('0423CK0006', '3 Months', '2023-10-27', 6000.00, '2024-01-27'),
('0223CK0007', 'Half-Yearly', '2023-10-26', 10000.00, '2024-04-26');



create table Slots(Candidate_Id char(10) not null, Department_Id char(5) not null,
Coach_Id char(10) not null, Day_1_time char(8) not null, Day_2_time char(8) not null,
Day_3_time char(8) not null, Day_4_time char(8) not null, Day_5_time char(8) not null,
Day_6_time char(8) not null, Day_7_time char(8) not null, foreign key(Candidate_Id)
references Candidate(Candidate_Id) on delete cascade, foreign key(Department_Id)
references Department(Department_Id) on delete cascade, foreign key(Coach_Id) references
Coach(Coach_Id) on delete cascade);



insert into Slots value('0723BP0001', 'D0007', '1028CBP001', '06:00 AM', '06:00 PM',
'06:00 AM', '06:00 PM', '06:00 AM', '06:00 PM','06:00 AM'),('0623BP0002', 'D0007',
'1014CBP002', '07:00 AM', '07:00 PM', '07:00 AM', '07:00 PM', '07:00 AM', '07:00
PM','07:00 AM'),('0523BP0003', 'D0007', '1028CBP001', '08:00 AM', '08:00 PM', '08:00
AM', '08:00 PM', '08:00 AM', '08:00 PM','08:00 AM'),('0423BP0004', 'D0007',
'1014CBP002', '06:00 AM', '06:00 PM', '06:00 AM', '06:00 PM', '06:00 AM', '06:00
PM','06:00 AM'),('0223BP0005', 'D0007', '1028CBP001', '07:00 AM', '07:00 PM', '07:00
AM', '07:00 PM', '07:00 AM', '07:00 PM','07:00 AM');
insert into Slots value('0621OL0003', 'D0005', '1028COL001', '07:00 AM', '07:00 PM',
'07:00 AM', '07:00 PM', '07:00 AM', '07:00 PM','07:00 AM'),('0617OL0004', 'D0005',
'0612COL002', '07:00 AM', '07:00 PM', '07:00 AM', '07:00 PM', '07:00 AM', '07:00 PM',
'07:00 AM'),('0713OL0005', 'D0005', '1028COL001', '08:00 AM', '08:00 PM', '08:00 AM',
'08:00 PM', '08:00 AM', '08:00 PM', '08:00 AM'),('0812OL0006', 'D0005', '0612COL002',
'08:00 AM', '08:00 PM', '08:00 AM', '08:00 PM', '08:00 AM', '08:00 PM','08:00
AM'),('0913OL0007', 'D0005', '1028COL001', '08:00 AM', '08:00 PM', '08:00 AM', '08:00
PM', '08:00 AM', '08:00 PM','08:00 AM');
insert into Slots value('0705PL0003', 'D0006', '0828CPL001', '07:00 AM', '07:00 PM',
'07:00 AM', '07:00 PM', '07:00 AM', '07:00 PM','07:00 AM'),('1019PL0004', 'D0006',
'0714CPL002', '07:00 AM', '07:00 PM', '07:00 AM', '07:00 PM', '07:00 AM', '07:00
PM','07:00 AM'),('0821PL0005', 'D0006', '0828CPL001', '07:30 AM', '07:30 PM', '07:30
AM', '07:30 PM', '07:30 AM', '07:30 PM','07:30 AM'),('0523PL0006', 'D0006',
'0714CPL002', '07:30 AM', '07:30 PM', '07:30 AM', '07:30 PM', '07:30 AM', '07:30
PM','07:30 AM'),('0623PL0007', 'D0006', '0714CPL002', '08:00 AM', '08:00 PM', '08:00
AM', '08:00 PM', '08:00 AM', '08:00 PM','08:00 AM');
insert into Slots value('0723FT0001', 'D0001', '1028CFT001', '07:00 AM', '07:00 PM',
'07:00 AM', '07:00 PM', '07:00 AM', '07:00 PM','07:00 AM'),('0623FT0002', 'D0001',
'0914CFT002', '07:00 AM', '07:00 PM', '07:00 AM', '07:00 PM', '07:00 AM', '07:00
PM','07:00 AM'),('0523FT0003', 'D0001', '1028CFT001', '07:00 AM', '07:00 PM', '07:00
AM', '07:00 PM', '07:00 AM', '07:00 PM','07:00 AM'),('0423FT0004', 'D0001',
'0914CFT002', '07:00 AM', '07:00 PM', '07:00 AM', '07:00 PM', '07:00 AM', '07:00
PM','07:00 AM'),('0223FT0005', 'D0001', '1028CFT001', '07:00 AM', '07:00 PM', '07:00
AM', '07:00 PM', '07:00 AM', '07:00 PM','07:00 AM');
insert into Slots value('0723BM0001', 'D0008', '0528CBT001', '07:00 AM', '07:00 PM',
'07:00 AM', '07:00 PM', '07:00 AM', '07:00 PM','07:00 AM'),('0623BM0002', 'D0008',
'0921CBT002', '07:00 AM', '07:00 PM', '07:00 AM', '07:00 PM', '07:00 AM', '07:00
PM','07:00 AM'),('0523BM0003', 'D0008', '0528CBT001', '08:00 AM', '08:00 PM', '08:00
AM', '08:00 PM', '08:00 AM', '08:00 PM','08:00 AM'),('0423BM0004', 'D0008',
'0921CBT002', '08:00 AM', '08:00 PM', '08:00 AM', '08:00 PM', '08:00 AM', '08:00
PM','08:00 AM'),('0223BM0005', 'D0008', '0528CBT001', '08:00 AM', '08:00 PM', '08:00
AM', '08:00 PM', '08:00 AM', '08:00 PM','08:00 AM');
```

```sql
insert into Slots value('0723TN0001', 'D0009', '1020CTN001', '07:00 AM', '07:00 PM',
'07:00 AM', '07:00 PM', '07:00 AM', '07:00 PM','07:00 AM'),('0623TN0002', 'D0009',
'1014CTN002', '08:00 AM', '08:00 PM', '08:00 AM', '08:00 PM', '08:00 AM', '08:00
PM','08:00 AM'),('0523TN0003', 'D0009', '1020CTN001', '07:00 AM', '07:00 PM', '07:00
AM', '07:00 PM', '07:00 AM', '07:00 PM','07:00 AM'),('0423TN0004', 'D0009',
'1014CTN002', '08:00 AM', '08:00 PM', '08:00 AM', '08:00 PM', '08:00 AM', '08:00
PM','08:00 AM'),('0223TN0005', 'D0009', '1014CTN002', '07:00 AM', '07:00 PM', '07:00
AM', '07:00 PM', '07:00 AM', '07:00 PM','07:00 AM');
insert into Slots value('0723KB0001', 'D0010', '0815CKB002', '08:00 AM', '08:00 PM',
'08:00 AM', '08:00 PM', '08:00 AM', '08:00 PM','08:00 AM'),('0623KB0002', 'D0010',
'1028CKB001', '08:00 AM', '08:00 PM', '08:00 AM', '08:00 PM', '08:00 AM', '08:00
PM','08:00 AM'),('0523KB0003', 'D0010', '0815CKB002', '08:00 AM', '08:00 PM', '08:00
AM', '08:00 PM', '08:00 AM', '08:00 PM','08:00 AM'),('0423KB0004', 'D0010',
'1028CKB001', '08:00 AM', '08:00 PM', '08:00 AM', '08:00 PM', '08:00 AM', '08:00
PM','08:00 AM'),('0223KB0005', 'D0010', '0815CKB002', '08:00 AM', '08:00 PM', '08:00
AM', '08:00 PM', '08:00 AM', '08:00 PM','08:00 AM');
insert into Slots value('1022BB0003', 'D0004', '1121CBB001', '08:00 AM', '08:00 PM',
'08:00 AM', '08:00 PM', '08:00 AM', '08:00 PM','08:00 AM'),('0321BB0004', 'D0004',
'0914CBB002', '08:00 AM', '08:00 PM', '08:00 AM', '08:00 PM', '08:00 AM', '08:00
PM','08:00 AM'),('0319BB0005', 'D0004', '1121CBB001', '08:00 AM', '08:00 PM', '08:00
AM', '08:00 PM', '08:00 AM', '08:00 PM','08:00 AM'),('0214BB0006', 'D0004',
'0914CBB002', '08:00 AM', '08:00 PM', '08:00 AM', '08:00 PM', '08:00 AM', '08:00
PM','08:00 AM'),('0223BB0007', 'D0004', '1121CBB001', '08:00 AM', '08:00 PM', '08:00
AM', '08:00 PM', '08:00 AM', '08:00 PM','08:00 AM');
insert into Slots value('0722VB0003', 'D0003', '0228CVB001', '08:00 AM', '08:00 PM',
'08:00 AM', '08:00 PM', '08:00 AM', '08:00 PM','08:00 AM'),('1021VB0004', 'D0003',
'1021CVB002', '08:00 AM', '08:00 PM', '08:00 AM', '08:00 PM', '08:00 AM', '08:00
PM','08:00 AM'),('1019VB0005', 'D0003', '0228CVB001', '08:00 AM', '08:00 PM', '08:00
AM', '08:00 PM', '08:00 AM', '08:00 PM','08:00 AM'),('0814VB0006', 'D0003',
'1021CVB002', '08:00 AM', '08:00 PM', '08:00 AM', '08:00 PM', '08:00 AM', '08:00
PM','08:00 AM'),('0904VB0007', 'D0003', '0228CVB001', '08:00 AM', '08:00 PM', '08:00
AM', '08:00 PM', '08:00 AM', '08:00 PM','08:00 AM');
insert into Slots value('0723CK0003', 'D0002', '0928CCK001', '08:00 AM', '08:00 PM',
'08:00 AM', '08:00 PM', '08:00 AM', '08:00 PM','08:00 AM'),('0623CK0004', 'D0002',
'1018CCK002', '08:00 AM', '08:00 PM', '08:00 AM', '08:00 PM', '08:00 AM', '08:00
PM','08:00 AM'),('0523CK0005', 'D0002', '0928CCK001', '08:00 AM', '08:00 PM', '08:00
AM', '08:00 PM', '08:00 AM', '08:00 PM','08:00 AM'),('0423CK0006', 'D0002',
'1018CCK002', '08:00 AM', '08:00 PM', '08:00 AM', '08:00 PM', '08:00 AM', '08:00
PM','08:00 AM'),('0223CK0007', 'D0002', '0928CCK001', '08:00 AM', '08:00 PM', '08:00
AM', '08:00 PM', '08:00 AM', '08:00 PM','08:00 AM');
```

3.4 DEMANDED QUERIES

LIKE AND BETWEEN

```
SELECT Coach_Id, Coach_Name FROM Coach WHERE Coach_Name LIKE '%Singh';
```

```
mysql> SELECT Coach_Id, Coach_Name
    -> FROM Coach
    -> WHERE Coach_Name LIKE '%Singh';
+------------+--------------+
| Coach_Id   | Coach_Name   |
+------------+--------------+
| 0815CKB002 | Sarita Singh |
| 1020CTN001 | Sanjay Singh |
| 1028COL001 | Vikas Singh  |
+------------+--------------+
3 rows in set (0.01 sec)
```

```
SELECT Department_Id, Department_Name FROM Department WHERE Department_Name LIKE '%Ball%';
```

```
mysql> SELECT Department_Id, Department_Name FROM Department WHERE Department_Name LIKE '%Ball%';
+---------------+--------------------------+
| Department_Id | Department_Name          |
+---------------+--------------------------+
| D0004         | Department of Basketball |
| D0001         | Department of Football   |
| D0003         | Department of Volleyball |
+---------------+--------------------------+
3 rows in set (0.00 sec)
```

```
SELECT Department_Id, Department_Name FROM Department WHERE Department_Id between "D0003" and "D0007";
```

```
mysql> SELECT Department_Id, Department_Name FROM Department WHERE Department_Id between "D0003" and "D0007";
+---------------+--------------------------------+
| Department_Id | Department_Name                |
+---------------+--------------------------------+
| D0004         | Department of Basketball       |
| D0007         | Department of Best-Physique    |
| D0005         | Department of Olympic-Weightlifting |
| D0006         | Department of Powerlifting     |
| D0003         | Department of Volleyball       |
+---------------+--------------------------------+
5 rows in set (0.00 sec)
```

GROUP BY

select Candidate_Id, Candidate_name, Department_name **from** Candidate **group by** Candidate_Id;

```
mysql> select Candidate_Id, Candidate_name, Department_name from Candidate
+--------------+----------------+--------------------------------+
| Candidate_Id | Candidate_name | Department_name                |
+--------------+----------------+--------------------------------+
| 0214BB0006   | Daniel Parker  | Department of Basketball       |
| 0223BB0007   | Sophia Scott   | Department of Basketball       |
| 0223BM0005   | Mason White    | Department of Badminton        |
| 0223BP0005   | Ethan Wilson   | Department of Best-Physique    |
| 0223CK0007   | Liam Brown     | Department of Cricket          |
| 0223FT0005   | Liam Brown     | Department of Football         |
| 0223KB0005   | Ethan Wilson   | Department of Kabaddi          |
| 0223TN0005   | Liam Brown     | Department of Tennis           |
| 0319BB0005   | Olivia Turner  | Department of Basketball       |
| 0321BB0004   | Emma Moore     | Department of Basketball       |
| 0423BM0004   | Ethan Moore    | Department of Badminton        |
| 0423BP0004   | Liam Smith     | Department of Best-Physique    |
| 0423CK0006   | Olivia Taylor  | Department of Cricket          |
| 0423FT0004   | Olivia Taylor  | Department of Football         |
| 0423KB0004   | Liam Smith     | Department of Kabaddi          |
| 0423TN0004   | Olivia Taylor  | Department of Tennis           |
| 0523BM0003   | Sophia Hall    | Department of Badminton        |
| 0523BP0003   | Edison         | Department of Best-Physique    |
| 0523CK0005   | Matthew Smith  | Department of Cricket          |
| 0523FT0003   | Daniel Smith   | Department of Football         |
| 0523KB0003   | Ella Brown     | Department of Kabaddi          |
| 0523PL0006   | Ethan Moore    | Department of Powerlifting     |
| 0523TN0003   | Daniel Smith   | Department of Tennis           |
| 0617OL0004   | Mia Lewis      | Department of Olympic-Weightlifting |
| 0621OL0003   | Aiden Adams    | Department of Olympic-Weightlifting |
| 0623BM0002   | Ava Turner     | Department of Badminton        |
| 0623BP0002   | Mike           | Department of Best-Physique    |
| 0623CK0004   | Emma Wilson    | Department of Cricket          |
| 0623FT0002   | Emily Wilson   | Department of Football         |
| 0623KB0002   | Mia Lewis      | Department of Kabaddi          |
| 0623PL0007   | Mason White    | Department of Powerlifting     |
| 0623TN0002   | Emily Wilson   | Department of Tennis           |
| 0705PL0003   | Liam Parker    | Department of Powerlifting     |
| 0713OL0005   | Ella Brown     | Department of Olympic-Weightlifting |
| 0722VB0003   | Ethan Davis    | Department of Volleyball       |
| 0723BM0001   | Liam Parker    | Department of Badminton        |
| 0723BP0001   | Aiden Adams    | Department of Best-Physique    |
| 0723CK0003   | Michael Johnson| Department of Cricket          |
| 0723FT0001   | David Johnson  | Department of Football         |
| 0723KB0001   | Aiden Adams    | Department of Kabaddi          |
| 0723TN0001   | David Johnson  | Department of Tennis           |
| 0812OL0006   | Liam Smith     | Department of Olympic-Weightlifting |
| 0814VB0006   | Ava Hall       | Department of Volleyball       |
| 0821PL0005   | Sophia Hall    | Department of Powerlifting     |
| 0904VB0007   | William Lee    | Department of Volleyball       |
| 0913OL0007   | Ethan Wilson   | Department of Olympic-Weightlifting |
| 1019PL0004   | Ava Turner     | Department of Powerlifting     |
| 1019VB0005   | Mason Evans    | Department of Volleyball       |
| 1021VB0004   | Sophia White   | Department of Volleyball       |
| 1022BB0003   | Liam Clark     | Department of Basketball       |
+--------------+----------------+--------------------------------+
50 rows in set (0.00 sec)
```

select Department_Id, Department_name, Start_date **from** Department **group by** Department_Id;

```
mysql> select Department_Id, Department_name, Start_date from Department group by Department_Id;
+---------------+-----------------------------------+------------+
| Department_Id | Department_name                   | Start_date |
+---------------+-----------------------------------+------------+
| D0001         | Department of Football            | 2023-01-15 |
| D0002         | Department of Cricket             | 2023-01-15 |
| D0003         | Department of Volleyball          | 2023-01-16 |
| D0004         | Department of Basketball          | 2023-01-16 |
| D0005         | Department of Olympic-Weightlifting | 2023-01-17 |
| D0006         | Department of Powerlifting        | 2023-01-17 |
| D0007         | Department of Best-Physique       | 2023-01-17 |
| D0008         | Department of Badminton           | 2023-01-18 |
| D0009         | Department of Tennis              | 2023-01-18 |
| D0010         | Department of Kabaddi             | 2023-01-18 |
+---------------+-----------------------------------+------------+
10 rows in set (0.00 sec)
```

HAVING

select * **from** Candidate **having** Department_Id = "D0002";

```
mysql> select * from Candidate having Department_Id = "D0002";
+--------------+------------------+---------------+-----------------------+--------+------------+-----------------+
| Candidate_Id | Candidate_name   | Department_Id | Department_name       | Gender | DOB        | Candidate_place |
+--------------+------------------+---------------+-----------------------+--------+------------+-----------------+
| 0223CK0007   | Liam Brown       | D0002         | Department of Cricket | Male   | 1999-02-15 | Delhi           |
| 0423CK0006   | Olivia Taylor    | D0002         | Department of Cricket | Female | 1993-09-05 | Kolkata         |
| 0523CK0005   | Matthew Smith    | D0002         | Department of Cricket | Male   | 1990-11-25 | Bangalore       |
| 0623CK0004   | Emma Wilson      | D0002         | Department of Cricket | Female | 1997-03-12 | Mumbai          |
| 0723CK0003   | Michael Johnson  | D0002         | Department of Cricket | Male   | 1995-06-10 | Chennai         |
+--------------+------------------+---------------+-----------------------+--------+------------+-----------------+
5 rows in set (0.00 sec)
```

select * **from** Slots **having** Department_Id = "D0005";

```
mysql> select * from Slots having Department_Id = "D0005";
+--------------+---------------+------------+------------+------------+------------+------------+------------+------------+------------+
| Candidate_Id | Department_Id | Coach_Id   | Day_1_time | Day_2_time | Day_3_time | Day_4_time | Day_5_time | Day_6_time | Day_7_time |
+--------------+---------------+------------+------------+------------+------------+------------+------------+------------+------------+
| 06210L0003   | D0005         | 1028COL001 | 07:00 AM   | 07:00 PM   | 07:00 AM   | 07:00 PM   | 07:00 AM   | 07:00 PM   | 07:00 AM   |
| 06170L0004   | D0005         | 0612COL002 | 07:00 AM   | 07:00 PM   | 07:00 AM   | 07:00 PM   | 07:00 AM   | 07:00 PM   | 07:00 AM   |
| 07130L0005   | D0005         | 1028COL001 | 08:00 AM   | 08:00 PM   | 08:00 AM   | 08:00 PM   | 08:00 AM   | 08:00 PM   | 08:00 AM   |
| 08120L0006   | D0005         | 0612COL002 | 08:00 AM   | 08:00 PM   | 08:00 AM   | 08:00 PM   | 08:00 AM   | 08:00 PM   | 08:00 AM   |
| 09130L0007   | D0005         | 1028COL001 | 08:00 AM   | 08:00 PM   | 08:00 AM   | 08:00 PM   | 08:00 AM   | 08:00 PM   | 08:00 AM   |
+--------------+---------------+------------+------------+------------+------------+------------+------------+------------+------------+
5 rows in set (0.00 sec)
```

SET

UNION

select Candidate_name, Department_name **from** Candidate **where** Department_Id="D0002" **union select** Candidate_name, Department_name **from** Candidate **where** Department_Id="D0005";

```
Database changed
mysql> select Candidate_name, Department_name from Candidate where Department_Id="D0002"
    -> union
    -> select Candidate_name, Department_name from Candidate where Department_Id="D0005";
+-----------------+----------------------------------+
| Candidate_name  | Department_name                  |
+-----------------+----------------------------------+
| Liam Brown      | Department of Cricket            |
| Olivia Taylor   | Department of Cricket            |
| Matthew Smith   | Department of Cricket            |
| Emma Wilson     | Department of Cricket            |
| Michael Johnson | Department of Cricket            |
| Mia Lewis       | Department of Olympic-Weightlifting |
| Aiden Adams     | Department of Olympic-Weightlifting |
| Ella Brown      | Department of Olympic-Weightlifting |
| Liam Smith      | Department of Olympic-Weightlifting |
| Ethan Wilson    | Department of Olympic-Weightlifting |
+-----------------+----------------------------------+
10 rows in set (0.01 sec)
```

select Coach_name, Coach_place, Gender **from** Coach **where** Department_Id="D0003" **union select** Coach_name, Coach_place, Gender **from** Coach **where** Department_Id="D0006";

```
mysql> select Coach_name, Coach_place, Gender from Coach where Department_Id="D0003" union select Coach_name, Coach_place, Gender from Coach where Department_Id="D0006";
+-------------+-------------+--------+
| Coach_name  | Coach_place | Gender |
+-------------+-------------+--------+
| Amit Kumar  | Kolkata     | Male   |
| Sneha Gupta | Chennai     | Female |
| Neha Patel  | Lucknow     | Female |
| Ramesh Kumar| Jaipur      | Male   |
+-------------+-------------+--------+
4 rows in set (0.00 sec)
```

INTERSECT

```
select Candidate_Id from Candidate intersect select Candidate_Id from Slots;
```

```
mysql> select Candidate_Id, Candidate_name, Department_name from Candidate g
+-------------+------------------+-----------------------------------+
| Candidate_Id | Candidate_name  | Department_name                   |
+-------------+------------------+-----------------------------------+
| 0214BB0006  | Daniel Parker    | Department of Basketball          |
| 0223BB0007  | Sophia Scott     | Department of Basketball          |
| 0223BM0005  | Mason White      | Department of Badminton           |
| 0223BP0005  | Ethan Wilson     | Department of Best-Physique        |
| 0223CK0007  | Liam Brown       | Department of Cricket             |
| 0223FT0005  | Liam Brown       | Department of Football            |
| 0223KB0005  | Ethan Wilson     | Department of Kabaddi             |
| 0223TN0005  | Liam Brown       | Department of Tennis              |
| 0319BB0005  | Olivia Turner    | Department of Basketball          |
| 0321BB0004  | Emma Moore       | Department of Basketball          |
| 0423BM0004  | Ethan Moore      | Department of Badminton           |
| 0423BP0004  | Liam Smith       | Department of Best-Physique        |
| 0423CK0006  | Olivia Taylor    | Department of Cricket             |
| 0423FT0004  | Olivia Taylor    | Department of Football            |
| 0423KB0004  | Liam Smith       | Department of Kabaddi             |
| 0423TN0004  | Olivia Taylor    | Department of Tennis              |
| 0523BM0003  | Sophia Hall      | Department of Badminton           |
| 0523BP0003  | Edison           | Department of Best-Physique        |
| 0523CK0005  | Matthew Smith    | Department of Cricket             |
| 0523FT0003  | Daniel Smith     | Department of Football            |
| 0523KB0003  | Ella Brown       | Department of Kabaddi             |
| 0523PL0006  | Ethan Moore      | Department of Powerlifting         |
| 0523TN0003  | Daniel Smith     | Department of Tennis              |
| 0617OL0004  | Mia Lewis        | Department of Olympic-Weightlifting |
| 0621OL0003  | Aiden Adams      | Department of Olympic-Weightlifting |
| 0623BM0002  | Ava Turner       | Department of Badminton           |
| 0623BP0002  | Mike             | Department of Best-Physique        |
| 0623CK0004  | Emma Wilson      | Department of Cricket             |
| 0623FT0002  | Emily Wilson     | Department of Football            |
| 0623KB0002  | Mia Lewis        | Department of Kabaddi             |
| 0623PL0007  | Mason White      | Department of Powerlifting         |
| 0623TN0002  | Emily Wilson     | Department of Tennis              |
| 0705PL0003  | Liam Parker      | Department of Powerlifting         |
| 0713OL0005  | Ella Brown       | Department of Olympic-Weightlifting |
| 0722VB0003  | Ethan Davis      | Department of Volleyball          |
| 0723BM0001  | Liam Parker      | Department of Badminton           |
| 0723BP0001  | Aiden Adams      | Department of Best-Physique        |
| 0723CK0003  | Michael Johnson  | Department of Cricket             |
| 0723FT0001  | David Johnson    | Department of Football            |
| 0723KB0001  | Aiden Adams      | Department of Kabaddi             |
| 0723TN0001  | David Johnson    | Department of Tennis              |
| 0812OL0006  | Liam Smith       | Department of Olympic-Weightlifting |
| 0814VB0006  | Ava Hall         | Department of Volleyball          |
| 0821PL0005  | Sophia Hall      | Department of Powerlifting         |
| 0904VB0007  | William Lee      | Department of Volleyball          |
| 0913OL0007  | Ethan Wilson     | Department of Olympic-Weightlifting |
| 1019PL0004  | Ava Turner       | Department of Powerlifting         |
| 1019VB0005  | Mason Evans      | Department of Volleyball          |
| 1021VB0004  | Sophia White     | Department of Volleyball          |
| 1022BB0003  | Liam Clark       | Department of Basketball          |
+-------------+------------------+-----------------------------------+
50 rows in set (0.00 sec)
```

```
select Coach Id from Coach intersect select Coach Id from Slots;
```

```
mysql> select Coach_Id from Coach intersect select Coach_Id from Slots;
+------------+
| Coach_Id   |
+------------+
| 0914CFT002 |
| 1028CFT001 |
| 0928CCK001 |
| 1018CCK002 |
| 0228CVB001 |
| 1021CVB002 |
| 0914CBB002 |
| 1121CBB001 |
| 0612COL002 |
| 1028COL001 |
| 0714CPL002 |
| 0828CPL001 |
| 1014CBP002 |
| 1028CBP001 |
| 0528CBT001 |
| 0921CBT002 |
| 1014CTN002 |
| 1020CTN001 |
| 0815CKB002 |
| 1028CKB001 |
+------------+
20 rows in set (0.01 sec)
```

UNION ALL

```
select Coach_name from Coach union all select Phone from Coach_ph_em;
```

```
mysql> select Coach_name from Coach union all select Phone from Coach_ph_em;
+---------------+
| Coach_name    |
+---------------+
| Amit Kumar    |
| Kunal Verma   |
| Divya Mehta   |
| Neha Patel    |
| Sarita Singh  |
| Ramesh Kumar  |
| Jay Shah      |
| Anjali Sharma |
| Rita Sharma   |
| Rajesh Sharma |
| Nisha Gupta   |
| Meera Joshi   |
| Preeti Patel  |
| Sanjay Singh  |
| Sneha Gupta   |
| Rajat Sharma  |
| Arvind Patel  |
| Mukesh Verma  |
| Vikas Singh   |
| Amith Shah    |
| 123-456-7890  |
| 987-654-3210  |
| 234-567-8901  |
| 876-543-2109  |
| 345-678-9012  |
| 765-432-1098  |
| 876-543-2109  |
| 567-890-1234  |
| 987-654-3210  |
| 678-901-2345  |
| 876-543-2109  |
| 789-012-3456  |
| 987-654-3210  |
| 890-123-4567  |
| 891-123-4567  |
| 987-654-3210  |
| 901-234-5678  |
| 911-234-5678  |
| 987-654-3210  |
| 123-456-7890  |
| 987-654-3210  |
+---------------+
42 rows in set (0.00 sec)
```

```
select Admin_name from Admin union all select City from Admin;
```

```
mysql> select Admin_name from Admin union all select City from Admin;
+----------------------+
| Admin_name           |
+----------------------+
| KIRAN R              |
| M V NAGAVARDHAN VASIST |
| MOHITH GOWDA K       |
| PRASHANTH M          |
| SHARATH H K          |
| MYSURU               |
| MALAVALLI            |
| MYSURU               |
| MYSURU               |
| MYSURU               |
+----------------------+
10 rows in set (0.00 sec)
```

Nested

```
SELECT Email FROM Candidate_ph_em WHERE Candidate_Id IN (SELECT Candidate_Id FROM
Candidate WHERE Department_Id = 'D0006');
```

```
mysql> SELECT Email FROM Candidate_ph_em WHERE Candidate_Id IN (SELECT Candidate_Id FROM Candidate WHERE Department_Id = 'D0006');
+-------------------+
| Email             |
+-------------------+
| ethan@example.com |
| ethan2@example.com |
| mason@example.com |
| mason2@example.com |
| liam@example.com  |
| liam2@example.com |
| sophia@example.com |
| sophia2@example.com |
| ava@example.com   |
| ava2@example.com  |
+-------------------+
10 rows in set (0.00 sec)
```

```
SELECT Candidate_Id, Candidate_Name FROM Candidate WHERE Candidate_Id IN (SELECT
Candidate_Id FROM Enroll WHERE Subscription_type = 'Monthly');
```

```
mysql> SELECT Candidate_Id, Candidate_Name
    -> FROM Candidate
    -> WHERE Candidate_Id IN (SELECT Candidate_Id FROM Enroll WHERE Subscription_type = 'Monthly');
+--------------+----------------+
| Candidate_Id | Candidate_Name |
+--------------+----------------+
| 0723BP0001   | Aiden Adams    |
| 0523BP0003   | Edison         |
| 0713OL0005   | Ella Brown     |
| 0821PL0005   | Sophia Hall    |
| 0523FT0003   | Daniel Smith   |
| 0523BM0003   | Sophia Hall    |
| 0523TN0003   | Daniel Smith   |
| 0523KB0003   | Ella Brown     |
| 0319BB0005   | Olivia Turner  |
| 1019VB0005   | Mason Evans    |
| 0523CK0005   | Matthew Smith  |
+--------------+----------------+
11 rows in set (0.00 sec)
```

```
SELECT Coach_Id, Coach_Name, (SELECT COUNT(*) FROM Slots WHERE Slots.Coach_Id =
Coach.Coach_Id) AS SlotCount FROM Coach;
```

```
mysql> SELECT Coach_Id, Coach_Name, (SELECT COUNT(*) FROM Slots WHERE Slots.Coach_Id = Coach.Coach_Id) AS SlotCount
    -> FROM Coach;
+------------+---------------+-----------+
| Coach_Id   | Coach_Name    | SlotCount |
+------------+---------------+-----------+
| 0228CVB001 | Amit Kumar    |         3 |
| 0528CBT001 | Kunal Verma   |         3 |
| 0612COL002 | Divya Mehta   |         2 |
| 0714CPL002 | Neha Patel    |         3 |
| 0815CKB002 | Sarita Singh  |         3 |
| 0828CPL001 | Ramesh Kumar  |         2 |
| 0914CBB002 | Jay Shah      |         2 |
| 0914CFT002 | Anjali Sharma |         2 |
| 0921CBT002 | Rita Sharma   |         2 |
| 0928CCK001 | Rajesh Sharma |         3 |
| 1014CBP002 | Nisha Gupta   |         2 |
| 1014CTN002 | Meera Joshi   |         3 |
| 1018CCK002 | Preeti Patel  |         2 |
| 1020CTN001 | Sanjay Singh  |         2 |
| 1021CVB002 | Sneha Gupta   |         2 |
| 1028CBP001 | Rajat Sharma  |         3 |
| 1028CFT001 | Arvind Patel  |         3 |
| 1028CKB001 | Mukesh Verma  |         2 |
| 1028COL001 | Vikas Singh   |         3 |
| 1121CBB001 | Amith Shah    |         3 |
+------------+---------------+-----------+
20 rows in set (0.00 sec)
```

```
SELECT Coach_Name FROM Coach WHERE Department_Id = (SELECT Department_Id FROM Department
WHERE Department_Name = 'Department of Cricket');
```

```
mysql> SELECT Coach_Name
    -> FROM Coach
    -> WHERE Department_Id = (SELECT Department_Id FROM Department WHERE Department_Name = 'Department of Cricket');
+---------------+
| Coach_Name    |
+---------------+
| Rajesh Sharma |
| Preeti Patel  |
+---------------+
2 rows in set (0.00 sec)
```

```
SELECT Candidate_Id, Subscription_type, Amount_paid FROM Enroll WHERE Amount_paid >
(SELECT AVG(Amount_paid) FROM Enroll );
```

```
mysql> SELECT Candidate_Id, Subscription_type, Amount_paid FROM Enroll WHERE Amount_paid > (SELECT AVG(Amount_paid) FROM Enroll );
+--------------+-------------------+-------------+
| Candidate_Id | Subscription_type | Amount_paid |
+--------------+-------------------+-------------+
| 0623BP0002   | Yearly            |    15000.00 |
| 0223BP0005   | Half-Yearly       |    10000.00 |
| 0617OL0004   | Half-Yearly       |    10000.00 |
| 0913OL0007   | Half-Yearly       |    10000.00 |
| 1019PL0004   | Yearly            |    15000.00 |
| 0623PL0007   | Half-Yearly       |    10000.00 |
| 0623FT0002   | Half-Yearly       |    15000.00 |
| 0223FT0005   | Half-Yearly       |    10000.00 |
| 0623BM0002   | Half-Yearly       |    15000.00 |
| 0223BM0005   | Half-Yearly       |    10000.00 |
| 0623TN0002   | Half-Yearly       |    15000.00 |
| 0223TN0005   | Half-Yearly       |    10000.00 |
| 0623KB0002   | Half-Yearly       |    15000.00 |
| 0223KB0005   | Half-Yearly       |    10000.00 |
| 0321BB0004   | Half-Yearly       |    15000.00 |
| 0223BB0007   | Half-Yearly       |    10000.00 |
| 1021VB0004   | Half-Yearly       |    15000.00 |
| 0904VB0007   | Half-Yearly       |    10000.00 |
| 0623CK0004   | Half-Yearly       |    15000.00 |
| 0223CK0007   | Half-Yearly       |    10000.00 |
+--------------+-------------------+-------------+
20 rows in set (0.00 sec)
```

SIMPLE

```
select * from Admin;
```

```
mysql> insert into Admin values("0923Ad0006", "DBMS", "dbms@0000", "0001-01-01", "UNKNOWN", "COMPUTER");
Query OK, 1 row affected (0.01 sec)

mysql> select * from Admin;
+------------+------------------------+----------------+------------+---------+----------+
| Admin_Id   | Admin_name             | Password       | DOB        | Gender  | City     |
+------------+------------------------+----------------+------------+---------+----------+
| 0823AD0001 | KIRAN R                | Kiran@2663     | 2002-11-23 | MALE    | MYSURU   |
| 0823AD0002 | M V NAGAVARDHAN VASIST | Vardhan@3866   | 2002-05-13 | MALE    | MALAVALLI|
| 0823AD0003 | MOHITH GOWDA K         | Mohith@0707    | 2003-05-11 | MALE    | MYSURU   |
| 0823AD0004 | PRASHANTH M            | Prashanth@2410 | 2003-10-24 | MALE    | MYSURU   |
| 0823AD0005 | SHARATH H K            | Sharath@2003   | 2003-05-03 | MALE    | MYSURU   |
| 0923Ad0006 | DBMS                   | dbms@0000      | 0001-01-01 | UNKNOWN | COMPUTER |
+------------+------------------------+----------------+------------+---------+----------+
6 rows in set (0.00 sec)
```

```
select * from Department;
```

```
mysql>  select * from Department;
+---------------+------------------------------+------------+
| Department_Id | Department_Name              | Start_Date |
+---------------+------------------------------+------------+
| D0001         | Department of Football       | 2023-01-15 |
| D0002         | Department of Cricket        | 2023-01-15 |
| D0003         | Department of Volleyball     | 2023-01-16 |
| D0004         | Department of Basketball     | 2023-01-16 |
| D0005         | Department of Olympic-Weightlifting | 2023-01-17 |
| D0006         | Department of Powerlifting   | 2023-01-17 |
| D0007         | Department of Best-Physique  | 2023-01-17 |
| D0008         | Department of Badminton      | 2023-01-18 |
| D0009         | Department of Tennis         | 2023-01-18 |
| D0010         | Department of Kabaddi        | 2023-01-18 |
+---------------+------------------------------+------------+
10 rows in set (0.00 sec)
```

```
insert into Admin values("0923Ad0006", "DBMS", "dbms@0000", "0001-01-01", "UNKNOWN",
"COMPUTER");
```

```
mysql> insert into Admin values("0923Ad0006", "DBMS", "dbms@0000", "0001-01-01", "UNKNOWN", "COMPUTER");
Query OK, 1 row affected (0.01 sec)

mysql> select * from Admin;
+------------+-----------------------+----------------+------------+---------+----------+
| Admin_Id   | Admin_name            | Password       | DOB        | Gender  | City     |
+------------+-----------------------+----------------+------------+---------+----------+
| 0823AD0001 | KIRAN R               | Kiran@2663     | 2002-11-23 | MALE    | MYSURU   |
| 0823AD0002 | M V NAGAVARDHAN VASIST | Vardhan@3866  | 2002-05-13 | MALE    | MALAVALLI |
| 0823AD0003 | MOHITH GOWDA K        | Mohith@0707    | 2003-05-11 | MALE    | MYSURU   |
| 0823AD0004 | PRASHANTH M           | Prashanth@2410 | 2003-10-24 | MALE    | MYSURU   |
| 0823AD0005 | SHARATH H K           | Sharath@2003   | 2003-05-03 | MALE    | MYSURU   |
| 0923Ad0006 | DBMS                  | dbms@0000      | 0001-01-01 | UNKNOWN | COMPUTER |
+------------+-----------------------+----------------+------------+---------+----------+
6 rows in set (0.00 sec)
```

```
delete from Admin where Admin_Name="DBMS";
```

```
mysql> delete from Admin where Admin_Name="DBMS";
Query OK, 1 row affected (0.01 sec)

mysql> select * from Admin;
+------------+-----------------------+----------------+------------+--------+----------+
| Admin_Id   | Admin_name            | Password       | DOB        | Gender | City     |
+------------+-----------------------+----------------+------------+--------+----------+
| 0823AD0001 | KIRAN R               | Kiran@2663     | 2002-11-23 | MALE   | MYSURU   |
| 0823AD0002 | M V NAGAVARDHAN VASIST | Vardhan@3866  | 2002-05-13 | MALE   | MALAVALLI |
| 0823AD0003 | MOHITH GOWDA K        | Mohith@0707    | 2003-05-11 | MALE   | MYSURU   |
| 0823AD0004 | PRASHANTH M           | Prashanth@2410 | 2003-10-24 | MALE   | MYSURU   |
| 0823AD0005 | SHARATH H K           | Sharath@2003   | 2003-05-03 | MALE   | MYSURU   |
+------------+-----------------------+----------------+------------+--------+----------+
5 rows in set (0.00 sec)
```

```
update Coach set Coach_name="M S Dhoni" where Coach_Id="0928CCK001";
```

```
mysql> update Coach set Coach_name="M S Dhoni" where Coach_Id="0928CCK001";
Query OK, 1 row affected (0.02 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> select * from Coach where Coach_Id="0928CCK001";
+------------+------------+--------+------------+-------------+---------------+
| Coach_Id   | Coach_name | Gender | DOB        | Coach_place | Department_Id |
+------------+------------+--------+------------+-------------+---------------+
| 0928CCK001 | M S Dhoni  | Male   | 1980-10-28 | Delhi       | D0002         |
+------------+------------+--------+------------+-------------+---------------+
1 row in set (0.00 sec)
```

4.SYSTEM TESTING AND RESULTS

```
mysql> SELECT Admin.Admin_Id, Admin.Admin_name, Admin.Password, Admin.DOB, Admin.Gender, Admin.City, Admin_ph_em.Email_Id, Admin
_ph_em.Phone
    -> FROM Admin
    -> LEFT JOIN Admin_ph_em ON Admin.Admin_Id = Admin_ph_em.Admin_Id;
+------------+----------------------+----------------+------------+--------+-----------+----------------------+------------+
| Admin_Id   | Admin_name           | Password       | DOB        | Gender | City      | Email_Id             | Phone      |
+------------+----------------------+----------------+------------+--------+-----------+----------------------+------------+
| 0823AD0001 | KIRAN R              | Kiran@2663     | 2002-11-23 | MALE   | MYSURU    | kiran@gmail.com      | 1234567890 |
| 0823AD0001 | KIRAN R              | Kiran@2663     | 2002-11-23 | MALE   | MYSURU    | kiran2@gmail.com     | 1111111111 |
| 0823AD0001 | KIRAN R              | Kiran@2663     | 2002-11-23 | MALE   | MYSURU    | kiran3@gmail.com     | -          |
| 0823AD0002 | M V NAGAVARDHAN VASIST | Vardhan@3866  | 2002-05-13 | MALE   | MALAVALLI | vasist@gmail.com     | 9999999999 |
| 0823AD0003 | MOHITH GOWDA K       | Mohith@0707    | 2003-05-11 | MALE   | MYSURU    | Mohith@gmail.com     | 2222222222 |
| 0823AD0003 | MOHITH GOWDA K       | Mohith@0707    | 2003-05-11 | MALE   | MYSURU    | Mohith1@gmail.com    | 6666666666 |
| 0823AD0004 | PRASHANTH M          | Prashanth@2410 | 2003-10-24 | MALE   | MYSURU    | Prashanth@gmail.com  | 3333333333 |
| 0823AD0004 | PRASHANTH M          | Prashanth@2410 | 2003-10-24 | MALE   | MYSURU    | Prashanth2@gmail.com | -          |
| 0823AD0005 | SHARATH H K          | Sharath@2003   | 2003-05-03 | MALE   | MYSURU    | Sharath@gmail.com    | 4444444444 |
+------------+----------------------+----------------+------------+--------+-----------+----------------------+------------+
9 rows in set (0.00 sec)
```

```
mysql> SELECT
    ->     Coach.Coach_Id,
    ->     Coach.Coach_name,
    ->     Coach.Department_Id,
    ->     Coach.Gender,
    ->     Coach.DOB,
    ->     Coach.Coach_place,
    ->     Coach_ph_em.Email,
    ->     Coach_ph_em.Phone
    -> FROM
    ->     Coach
    -> LEFT JOIN
    ->     Coach_ph_em ON Coach.Coach_Id = Coach_ph_em.Coach_Id
    -> ORDER BY
    ->     Coach.Department_Id;
+------------+---------------+---------------+--------+------------+---------------+--------------------------+--------------+
| Coach_Id   | Coach_name    | Department_Id | Gender | DOB        | Coach_place   | Email                    | Phone        |
+------------+---------------+---------------+--------+------------+---------------+--------------------------+--------------+
| 0914CFT002 | Anjali Sharma | D0001         | Female | 1985-10-28 | Visakhapatnam | anjali.sharma@gmail.com  | 987-654-3210 |
| 1028CFT001 | Arvind Patel  | D0001         | Male   | 1980-10-28 | Trivandrum    | arvind.patel@gmail.com   | 901-234-5678 |
| 1028CFT001 | Arvind Patel  | D0001         | Male   | 1980-10-28 | Trivandrum    | arvind.patel2@gmail.com  | 911-234-5678 |
| 0928CCK001 | Rajesh Sharma | D0002         | Male   | 1980-10-28 | Delhi         | rajesh.sharma@gmail.com  | 123-456-7890 |
| 1018CCK002 | Preeti Patel  | D0002         | Female | 1985-10-28 | Mumbai        | preeti.patel@gmail.com   | 987-654-3210 |
| 0228CVB001 | Amit Kumar    | D0003         | Male   | 1980-10-28 | Kolkata       | amit.kumar@gmail.com     | 234-567-8901 |
| 1021CVB002 | Sneha Gupta   | D0003         | Female | 1985-10-28 | Chennai       | sneha.gupta@gmail.com    | 876-543-2109 |
| 1121CBB001 | Amith Shah    | D0004         | Male   | 1980-10-28 | Trivandrum    | amith.shah@gmail.com     | 123-456-7890 |
| 0914CBB002 | Jay Shah      | D0004         | Male   | 1985-10-28 | Visakhapatnam | jay.shah@gmail.com       | 987-654-3210 |
| 0612COL002 | Divya Mehta   | D0005         | Female | 1985-10-28 | Chandigarh    | divya.mehta@gmail.com    | 876-543-2109 |
| 1028COL001 | Vikas Singh   | D0005         | Male   | 1980-10-28 | Bhopal        | vikas.singh@gmail.com    | 678-901-2345 |
| 0714CPL002 | Neha Patel    | D0006         | Female | 1985-10-28 | Lucknow       | neha.patel@gmail.com     | 987-654-3210 |
| 0828CPL001 | Ramesh Kumar  | D0006         | Male   | 1980-10-28 | Jaipur        | ramesh.kumar@gmail.com   | 567-890-1234 |
| 1014CBP002 | Nisha Gupta   | D0007         | Female | 1985-10-28 | Surat         | nisha.gupta@gmail.com    | 987-654-3210 |
| 1028CBP001 | Rajat Sharma  | D0007         | Male   | 1980-10-28 | Nagpur        | rajat.sharma@gmail.com   | 890-123-4567 |
| 1028CBP001 | Rajat Sharma  | D0007         | Male   | 1980-10-28 | Nagpur        | rajat.sharma2@gmail.com  | 891-123-4567 |
| 0921CBT002 | Rita Sharma   | D0008         | Female | 1985-10-28 | Ahmedabad     | rita.sharma@gmail.com    | 876-543-2109 |
| 0528CBT001 | Kunal Verma   | D0008         | Male   | 1980-10-28 | Pune          | kunal.verma@gmail.com    | 456-789-0123 |
| 1020CTN001 | Sanjay Singh  | D0009         | Male   | 1980-10-28 | Bengaluru     | sanjay.singh@gmail.com   | 345-678-9012 |
| 1014CTN002 | Meera Joshi   | D0009         | Female | 1985-10-28 | Hyderabad     | meera.joshi@gmail.com    | 765-432-1098 |
| 1028CKB001 | Mukesh Verma  | D0010         | Male   | 1980-10-28 | Coimbatore    | mukesh.verma@gmail.com   | 789-012-3456 |
| 0815CKB002 | Sarita Singh  | D0010         | Female | 1985-10-28 | Indore        | sarita.singh@gmail.com   | 987-654-3210 |
+------------+---------------+---------------+--------+------------+---------------+--------------------------+--------------+
22 rows in set (0.00 sec)
```

```
mysql> select Coach.Coach_Id, Coach.Coach_name, Coach.Department_Id from Coach order by Department_Id;
+------------+---------------+---------------+
| Coach_Id   | Coach_name    | Department_Id |
+------------+---------------+---------------+
| 0914CFT002 | Anjali Sharma | D0001         |
| 1028CFT001 | Arvind Patel  | D0001         |
| 0928CCK001 | Rajesh Sharma | D0002         |
| 1018CCK002 | Preeti Patel  | D0002         |
| 0228CVB001 | Amit Kumar    | D0003         |
| 1021CVB002 | Sneha Gupta   | D0003         |
| 1121CBB001 | Amith Shah    | D0004         |
| 0914CBB002 | Jay Shah      | D0004         |
| 0612COL002 | Divya Mehta   | D0005         |
| 1028COL001 | Vikas Singh   | D0005         |
| 0714CPL002 | Neha Patel    | D0006         |
| 0828CPL001 | Ramesh Kumar  | D0006         |
| 1014CBP002 | Nisha Gupta   | D0007         |
| 1028CBP001 | Rajat Sharma  | D0007         |
| 0921CBT002 | Rita Sharma   | D0008         |
| 0528CBT001 | Kunal Verma   | D0008         |
| 1020CTN001 | Sanjay Singh  | D0009         |
| 1014CTN002 | Meera Joshi   | D0009         |
| 1028CKB001 | Mukesh Verma  | D0010         |
| 0815CKB002 | Sarita Singh  | D0010         |
+------------+---------------+---------------+
20 rows in set (0.00 sec)
```

5.CONCLUSION

- **Approach to Work Planning:** The management of the Sports Club will be meticulously organized and executed. Data storage will be optimized to ensure efficient utilization of disk space in the data repositories, facilitating both the retrieval and storage of information within the constraints of available resources.

- **Precision:** The proposed system will uphold a superior level of precision. All operations will adhere to integrity constraints, guaranteeing the accuracy of information both received and transmitted by the center.

- **Dependability:** The dependability of the proposed system will be notably robust due to the aforementioned considerations. This reliability is reinforced by the fact that only data adhering to the accuracy criteria will be permitted for permanent storage. Furthermore, SQL systems inherently manage critical aspects such as transaction handling and rollback procedures in the event of system or power failures, making them an exceptional choice for the DBMS system. Essential properties such as atomicity, consistency, isolation, and data security are inherently upheld.

6. REFERENCES

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- Oracle Database MySQL-8.0
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- www.youtube.com
- www.geeksforgeeks.com