ANJUMAN-I-ISLAM'S

M. H. SABOO SIDDIK COLLEGE OF ENGINEERING

(Affiliated to University of Mumbai)

BYCULLA, MUMBAI-400008

A MINI-PROJECT REPORT

ON

"IPL EVENT MANAGEMENT SYSTEM"

Submitted By

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CERTIFICATE

Certified that the mini-project work entitled **"IPL EVENT MANAGEMENT SYSTEM"** is a bona fide work carried out by

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The report has been approved as it satisfies the academic requirements in respect of mini-project work prescribed for the course **Database Management System**

………………………   …………………………

Er. Fieroz Shaikh.   **Er. Abdul Sayeed**

Mini-Project Coordinator   Head of the Department

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ABSTRACT

IPL Event Management project is a DBMS project which is built using MySQL and code has been run on the CMD and Workbench. This project helps in managing various IPL Events effectively. There are several features such as Owner ID, Name of the Team playing, Owner of that team, Location ID of stadium where match is to be played, Stadium location name, Capacity of the stadium, etc.

Online event management system is an online event management system software project that serves the functionality of an event manager. The system helps in the management of events, users and the aspects related to them. This proposed to be a web application. The project provides most of the basic functionality required for an event type e.g. IPL Matches details, Whom versus whom, Team who won the match on which date, Point system, etc.], the system then allows the user to select date and time of event, place and the event equipment. All the data is logged in the database and the user can view all the matches and get the useful insights from the match. The data is then sent to administrator and they may interact with the client as per his requirement per his requirement. The main motive of this project is to understand IPL event and get the useful insights from the matches and decide the strategy.

<u>INTRODUCTION</u>

 Event management is the application of project management to the creation and development of small and/or large-scale personal or corporate events such as festivals, conferences, ceremonies, weddings, formal parties, concerts, or conventions. It involves studying the brand, identifying its target audience, devising the event concept, and
Coordinating the technical aspects before launching the event.

The process of planning and coordinating the event is usually referred to as event planning and which can include budgeting, scheduling, site selection, acquiring necessary permits, coordinating transportation and parking, arranging for speakers or entertainers, arranging decor, event security, catering, coordinating with third-party vendors, and emergency plans. Each event is different in its nature so process of planning & execution of each event differs on basis of the type of event.

The event manager is the person who plans and executes the event, taking responsibility for the creative, technical, and logistical elements. This includes overall event design, brand building, marketing, and communication strategy, audio-visual production, script writing, logistics, budgeting, negotiation, and client service.

An event venue may be an online or offline. The event administrator is responsible for operations at a such as database updating, point table making, adding information, updating changes in real time. An event admin will monitor all aspects of the event on-site.

IMPLEMENTATION

In this project we are using Command prompt window which is easily available in every window where we have to write our code. But to run your code on command prompt first you have to install MySQL and after installing it we have to store it in one of the drives, like in my PC it is stored in "F" drive. The process of installing MySQL is given below:

The following requirements should be available in your system to work with MySQL:
- Microsoft .NET Framework 4.5.2
- Microsoft Visual C++ Redistributable for Visual Studio 2019
- RAM 4 GB (6 GB recommended)

Step 1: Go to the official website of MySQL and download the community server edition software. Here, you will see the option to choose the Operating System, such as Windows.

Step 2: Next, there are two options available to download the setup. Choose the version number for the MySQL community server, which you want. If you have good internet connectivity, then choose the mysql-installer-web-community. Otherwise, choose the other one.
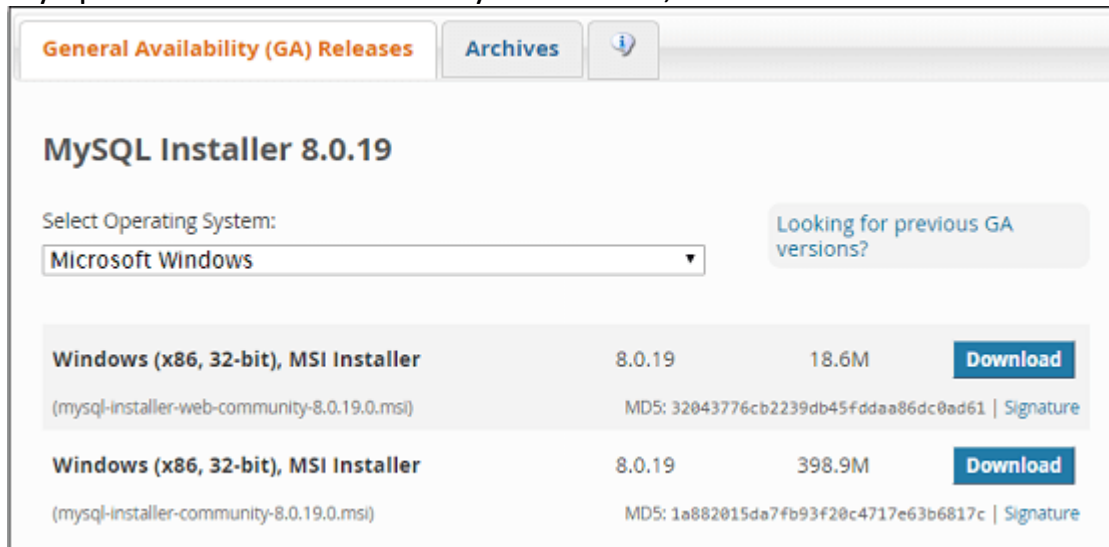
Step 3: After downloading the setup, unzip it anywhere and double click the MSI installer .exe file. It will give the following screen:
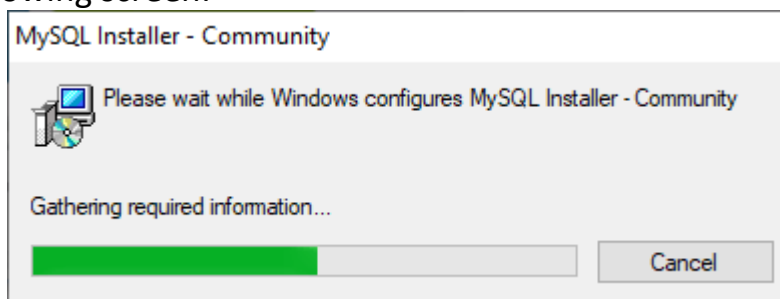
Step 4: In the next wizard, choose the Setup Type. There are several types available, and you need to choose the appropriate option to install MySQL product and features. Here, we are going to select the Full option and click on the Next button.
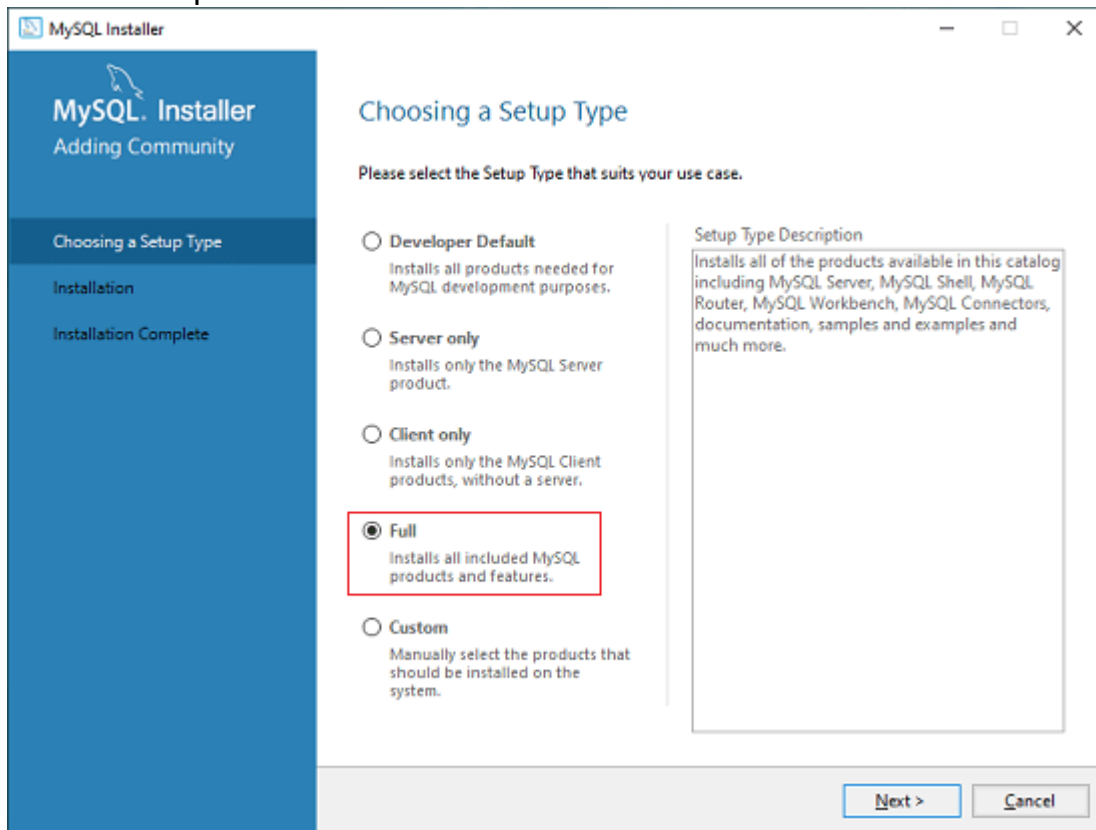
This option will install the following things: MySQL Server, MySQL Shell, MySQL Router, MySQL Workbench, MySQL Connectors, documentation, samples and examples, and many more.

Step 3: Once we click on the Next button, it may give information about some features that may fail to install on your system due to a lack of requirements. We can resolve them by clicking on the Execute button that will install all requirements automatically or can skip them. Now, click on the Next button. In the next wizard, we will see a dialog box that asks for our confirmation of a few products not getting installed. Here, we have to click on the Yes button.
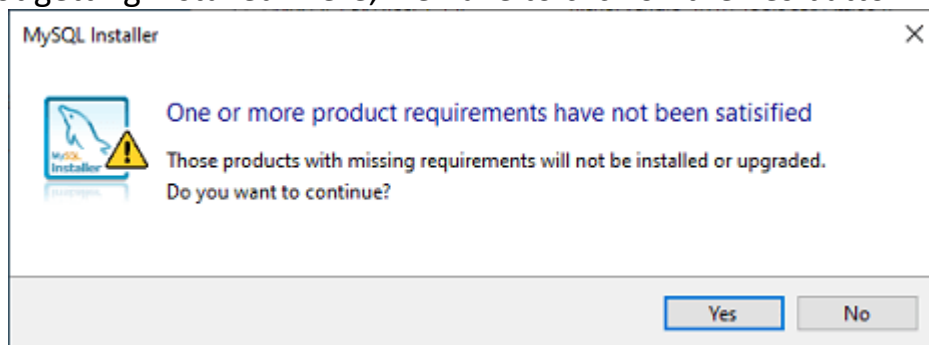
After clicking on the Yes button, we will see the list of the products which are going to be installed. So, if we need all products, click on the Execute button.

Step 4: Once we click on the Execute button, it will download and install all the products. After completing the installation, click on the Next button. In the next wizard, we need to configure the MySQL Server and Router. Here, I am not going to configure the Router because there is no need to use it with MySQL. We are going to show you how to configure the server only. Now,

click on the Next button. As soon as you will click on the Next button, you can see the screen below. Here, we have to configure the MySQL Server. Now, choose the Standalone MySQL Server/Classic MySQL Replication option and click on Next. Here, you can also choose the InnoDB Cluster based on your needs. In the next screen, the system will ask you to choose the Config Type and other connectivity options. Here, we are going to select the Config Type as 'Development Machine' and Connectivity as TCP/IP, and Port Number is 3306, then click on Next. Now, select the Authentication Method and click on Next. Here, I am going to select the first option.

Step 10: The next screen will ask you to mention the MySQL Root Password. After filling the password details, click on the Next button.

The next screen will ask you to configure the Windows Service to start the server. Keep the default setup and click on the Next button. In the next wizard, the system will ask you to apply the Server Configuration. If you agree with this configuration, click on the Execute button. Once the configuration has completed, you will get the screen below. Now, click on the Finish button to continue. In the next screen, you can see that the Product Configuration is completed. Keep the default setting and click on the Next-> Finish button to complete the MySQL package installation. In the next wizard, we can choose to configure the Router. So click on Next->Finish and then click the Next button. In the next wizard, we will see the Connect to Server option. Here, we have to mention the root password, which we had set in the previous steps. In this screen, it is also required to check about the connection is successful or not by clicking on the Check button. If the connection is successful, click on the Execute button. Now, the configuration is complete, click on Next.

Step 17: In the next wizard, select the applied configurations and click on the Execute button. After completing the above step, we will get the following screen. Here, click on the Finish button.
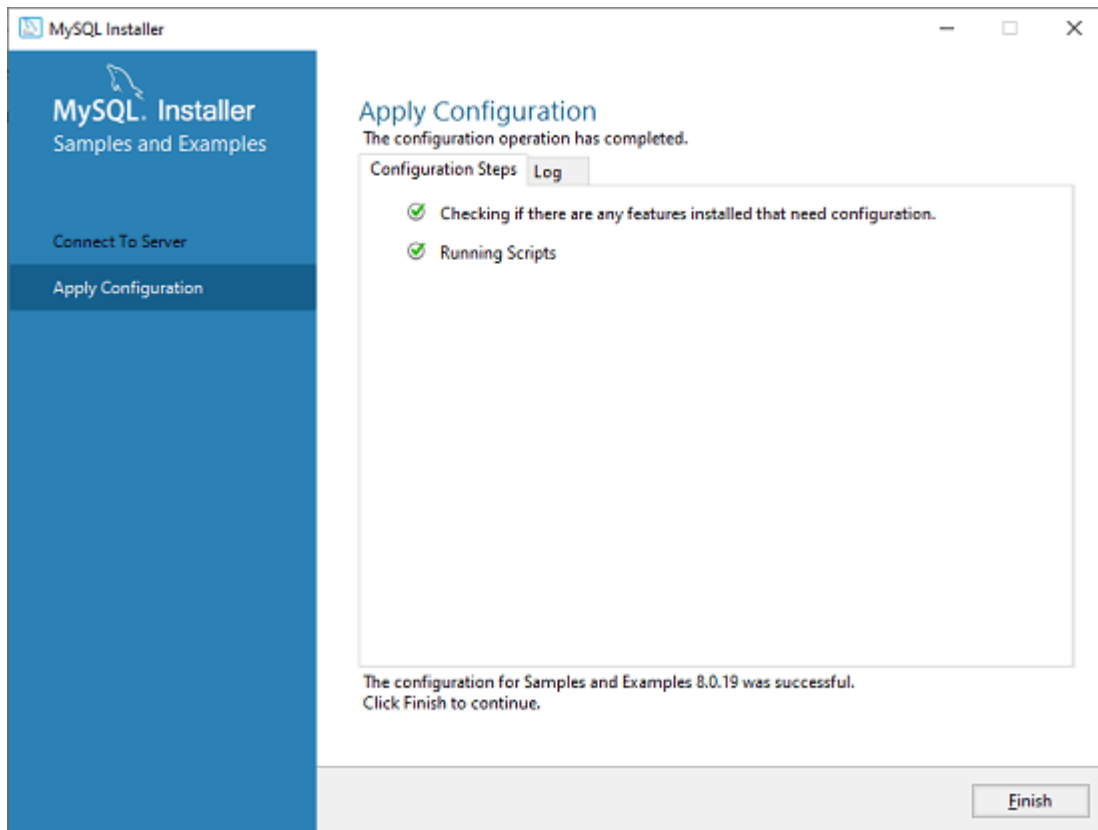
Now, the MySQL installation is complete. Click on the Finish button. Once MySQL has been successfully installed, the base tables have been initialized, and the server has been started, you can verify its working via some simple tests.

Open your MySQL Command Line Client; it should have appeared with a mysql> prompt. If you have set any password, write your password here. Now, you are connected to the MySQL server, and you can execute all the SQL command at mysql> prompt as follows:

For example: Check the already created databases with show databases command:
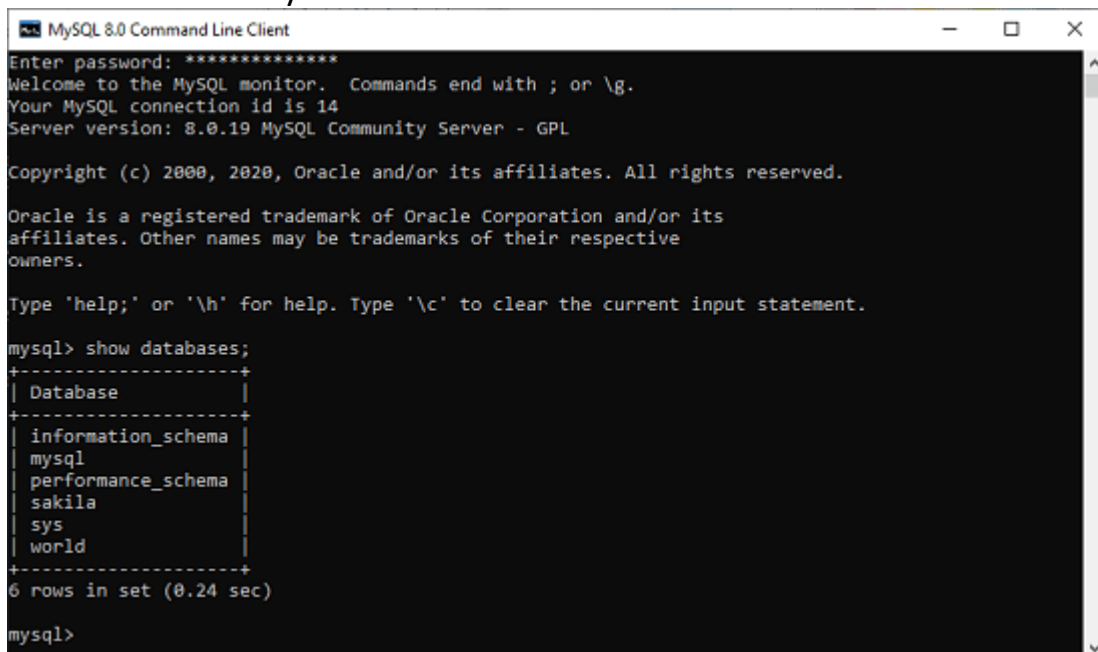
E-R MODEL

Before starting project, we need to understand the project first. Below is the E-R Model of the project and also the table description to get started.
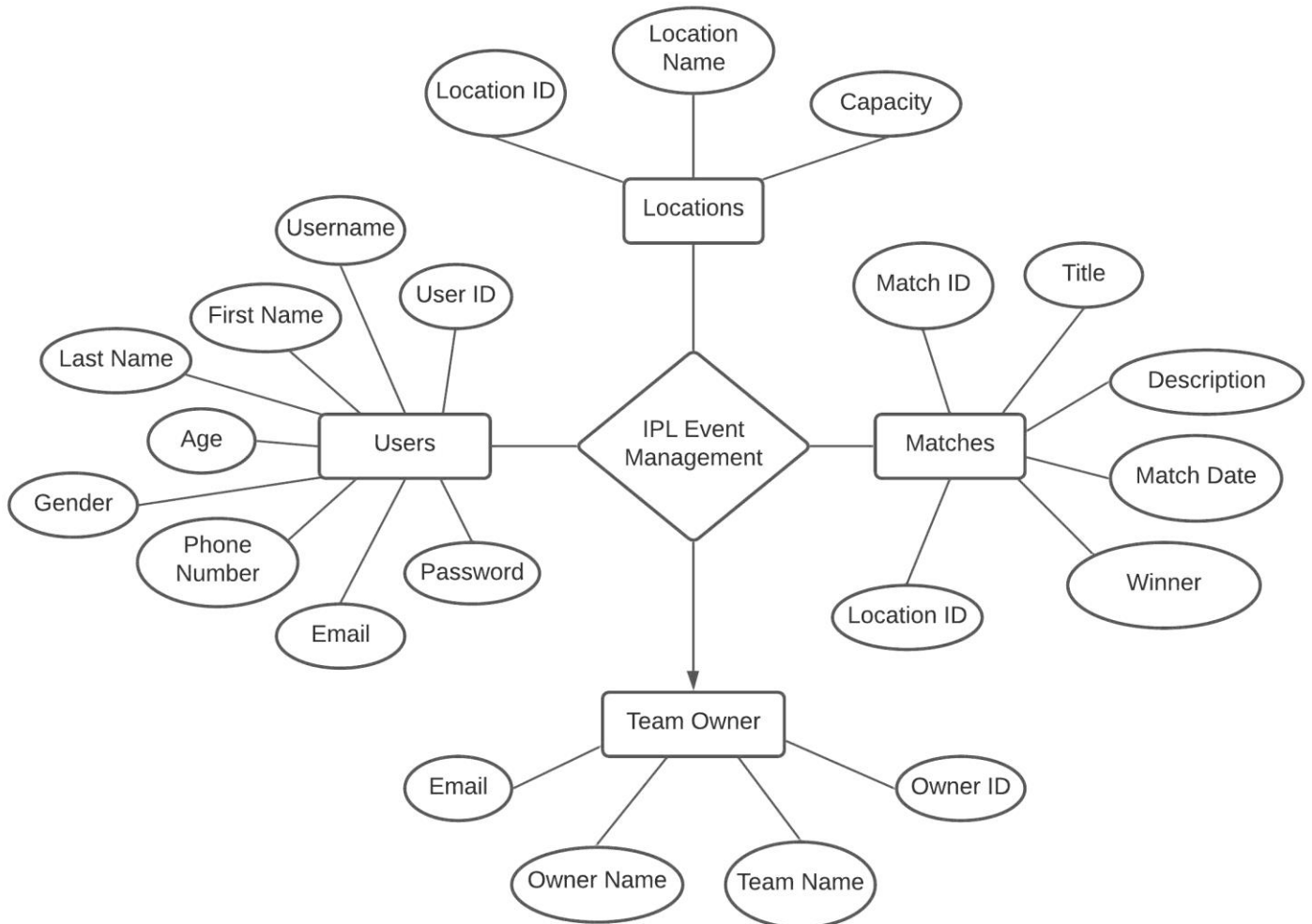
❖ **TOTAL TABLES IN OUR PROJECT**

```
+---------------------------------+
| Tables_in_ipl_event_management |
+---------------------------------+
| locations                       |
| matches                         |
| team_owners                     |
| users                           |
+---------------------------------+
4 rows in set (0.05 sec)
```

❖ LOCATION TABLE DESCRIPTION

```
mysql> DESCRIBE locations;
+---------------+-------------+------+-----+---------+-------+
| Field         | Type        | Null | Key | Default | Extra |
+---------------+-------------+------+-----+---------+-------+
| location_id   | int         | NO   | PRI | NULL    |       |
| location_name | varchar(50) | NO   |     | NULL    |       |
| capacity      | int         | NO   |     | NULL    |       |
+---------------+-------------+------+-----+---------+-------+
3 rows in set (0.06 sec)
```

❖ TEAM OWNERS TABLE DESCRIPTION

```
mysql> DESCRIBE team_owners;
+------------+-------------+------+-----+---------+-------+
| Field      | Type        | Null | Key | Default | Extra |
+------------+-------------+------+-----+---------+-------+
| owners_id  | int         | NO   | PRI | NULL    |       |
| team_name  | varchar(50) | NO   |     | NULL    |       |
| owner_name | varchar(50) | NO   |     | NULL    |       |
| email      | varchar(50) | NO   |     | NULL    |       |
+------------+-------------+------+-----+---------+-------+
4 rows in set (0.01 sec)
```

❖ MATCHES TABLE DESCRIPTION

```
mysql> DESCRIBE MATCHES;
+-------------+-------------+------+-----+----------------------+-------+
| Field       | Type        | Null | Key | Default              | Extra |
+-------------+-------------+------+-----+----------------------+-------+
| match_id    | int         | NO   | PRI | NULL                 |       |
| title       | varchar(30) | NO   |     | NULL                 |       |
| description | varchar(30) | NO   |     | NULL                 |       |
| match_date  | varchar(30) | NO   |     | NULL                 |       |
| winner      | varchar(50) | YES  |     | Winner Not Announced |       |
| location_id | int         | YES  | MUL | NULL                 |       |
+-------------+-------------+------+-----+----------------------+-------+
6 rows in set (0.02 sec)
```

❖ **USERS TABLE DESCRIPTION**

```
mysql> DESCRIBE users;
+--------------+-------------+------+-----+---------+-------+
| Field        | Type        | Null | Key | Default | Extra |
+--------------+-------------+------+-----+---------+-------+
| user_id      | int         | NO   | PRI | NULL    |       |
| user_name    | varchar(50) | NO   |     | NULL    |       |
| first_name   | varchar(50) | NO   |     | NULL    |       |
| last_name    | varchar(50) | NO   |     | NULL    |       |
| age          | int         | NO   |     | NULL    |       |
| gender       | varchar(50) | NO   |     | NULL    |       |
| phone_number | bigint      | YES  |     | NULL    |       |
| email        | varchar(50) | NO   |     | NULL    |       |
| password     | varchar(50) | NO   |     | NULL    |       |
+--------------+-------------+------+-----+---------+-------+
9 rows in set (0.02 sec)
```

One thing to note is PRIMARY KEY are those which are unique and represent the primary column for that table. In our table, MATCHES the location_id is represented as FOREIGN KEY which is reference of location_id in the table LOCATION. Our table mostly contain the below types of variables:

❖ INT: Used to input an integer or number

❖ VARCHAR(SIZE): Used to input a string with a given byte size

❖ BIGINT: Used to input a larger size of integer

The NULL parameter basically defines whether the column contain a NULL value or not.

The Key column represents whether the row is PRIMARY KEY or MULTIKEY.

The Default columns represent what data should be present as default if no data is given by user. So as you can see in the TABLE MATCHES, if the winner column doesn't have any data then the default value will be "Winner not announced". This is helpful if you want to show the data even the matches haven't been held and winners is not announced.

Don't worry for the codes for now, we will analyze the code in the later part.

SOURCE CODE

SOFTWARE USED:

- MySQL Server
- Command Prompt
- MySQL Workbench 8.0 CE

HARDWARE USED:

- Windows 10

MYSQL CODE :

➢ CREATING DATABASE AND USING IT

```
CREATE DATABASE ipl_event_namagement;
USE ipl_event_management;
```

➢ CREATING TABLE 1: LOCATION

```
CREATE TABLE IF NOT EXISTS locations (
location_id INT,
location_name VARCHAR (50) NOT NULL,
capacity INT NOT NULL,
PRIMARY KEY (location_id)
);
```

➢ CREATING TABLE 2: TEAM OWNERS

```
CREATE TABLE IF NOT EXISTS team_owners (
owners_id INT,
team_name VARCHAR(50) NOT NULL,
owner_name VARCHAR(50) NOT NULL,
email VARCHAR(50) NOT NULL,
PRIMARY KEY (owners_id)
);
```

➢ CREATING TABLE 3: MATCHES

```
CREATE TABLE IF NOT EXISTS matches (
match_id INT,
title VARCHAR(30) NOT NULL,
description VARCHAR(30) NOT NULL,
match_date VARCHAR(30) NOT NULL,
```

```
winner VARCHAR(50) DEFAULT 'Winner Not Announced',
location_id INT,
PRIMARY KEY (match_id),
FOREIGN KEY (location_id) REFERENCES locations(location_id)
);
```

➢ CREATING TABLE 4: USERS

```
CREATE TABLE IF NOT EXISTS users (
user_id INT,
user_name VARCHAR(50) NOT NULL,
first_name VARCHAR(50) NOT NULL,
last_name VARCHAR(50) NOT NULL,
age INT NOT NULL,
gender VARCHAR(50) NOT NULL,
phone_number BIGINT,
email VARCHAR(50) NOT NULL,
password VARCHAR(50) NOT NULL,
PRIMARY KEY (user_id)
);
```

➢ INSERTING VALUES IN TABLE 1: LOCATION

```
INSERT INTO locations (location_id, location_name, capacity)
VALUES (1, 'Mumbai', 132000),
(2, 'Chennai', 100024),
(3, 'Ahmedabad', 80000),
(4, 'Delhi', 65400),
(5, 'Bengaluru', 60000),
(6, 'Kolkata', 55000),
(7, 'Hyderabad', 53583),
(8, 'Gujrat', 48003);
```

➢ INSERTING VALUES IN TABLE 2: TEAM OWNERS

```
INSERT INTO team_owners (owners_id, team_name, owner_name , email)
VALUES (1, 'Mumbai Indians (MI)', 'Mukesh Ambani', 'mukesh.ambani@ril.com'),
(2, 'Chennai Super Kings (CSK)', 'N Srinivasan', 'md@indiacements.co.in'),
(3, 'Sunrisers Hyderabad (SRH)', 'Kalanithi Maran', 'tvinfo@sunnetwork.in'),
(4, 'Punjab Kings (PK)', 'Preity Zinta', 'preityzinta@gmail.com'),
(5, 'Delhi Capitals (DC)', 'Parth Jindal', 'parth.jindal@jsw.in'),
(6, 'Rajasthan Royals (RR)', 'Manoj Badale', 'manoj@agilisys.co.uk'),
(7, 'Royal Challengers Bangalore (RCB)', 'United Spirits Ltd',
'ramachandran.venkatesan@diageo.com'),
```

(8, 'Kolkata Knight Riders (KKR)', 'Shah Rukh Khan and Juhi Chawla', 'srkfans@redchillies.com');

➢ INSERTING VALUES IN TABLE 3: MATCHES

INSERT INTO matches (match_id, title, description, match_date, winner, location_id)
VALUES (1, 'MI vs RCB', 'Indian Premier League 2021', '9 April 2021', 'RCB', 2),
(2, 'CSK vs DC', 'Indian Premier League 2021', '10 April 2021', 'DC', 1),
(3, 'SRH vs KKR', 'Indian Premier League 2021', '11 April 2021', 'KKR', 2),
(4, 'RR vs PK', 'Indian Premier League 2021', '12 April 2021', 'PK', 1),
(5, 'KKR vs MI', 'Indian Premier League 2021', '13 April 2021', 'MI', 2),
(6, 'SRH vs RCB', 'Indian Premier League 2021', '14 April 2021', 'RCB', 2),
(7, 'RR vs DC', 'Indian Premier League 2021', '15 April 2021', 'RR', 1),
(8, 'PK vs CSK', 'Indian Premier League 2021', '16 April 2021', 'CSK', 1),
(9, 'MI vs SRH', 'Indian Premier League 2021', '17 April 2021', 'MI', 2),
(10, 'RCB vs KKR', 'Indian Premier League 2021', '18 April 2021', 'RCB', 2),
(11, 'DC vs PK', 'Indian Premier League 2021', '18 April 2021', 'DC', 1),
(12, 'CSK vs RR', 'Indian Premier League 2021', '19 April 2021', 'CSK', 1),
(13, 'DC vs MI', 'Indian Premier League 2021', '20 April 2021', 'DC', 2),
(14, 'PK vs SRH', 'Indian Premier League 2021', '21 April 2021', 'SRH', 2),
(15, 'KKR vs CSK', 'Indian Premier League 2021', '21 April 2021', 'CSK', 1),
(16, 'RCB vs RR', 'Indian Premier League 2021', '22 April 2021', 'RCB', 1),
(17, 'PK vs MI', 'Indian Premier League 2021', '23 April 2021', 'MI', 2),
(18, 'RR vs KKR', 'Indian Premier League 2021', '24 April 2021', 'KKR', 1),
(19, 'CSK vs RCB', 'Indian Premier League 2021', '25 April 2021', 'CSK', 1),
(20, 'SRH vs DC', 'Indian Premier League 2021', '25 April 2021', 'SRH', 2),
(21, 'PK vs KKR', 'Indian Premier League 2021', '26 April 2021', 'PK', 3),
(22, 'DC vs RCB', 'Indian Premier League 2021', '27 April 2021', 'DC', 3),
(23, 'CSK vs SRH', 'Indian Premier League 2021', '28 April 2021', 'SRH', 4),
(24, 'MI vs RR', 'Indian Premier League 2021', '29 April 2021', 'MI', 4),
(25, 'DC vs KKR', 'Indian Premier League 2021', '29 April 2021', 'KKR', 3),
(26, 'PK vs RCB', 'Indian Premier League 2021', '30 April 2021', 'PK', 3),
(27, 'MI vs CSK', 'Indian Premier League 2021', '1 May 2021', 'MI', 4),
(28, 'RR vs SRH', 'Indian Premier League 2021', '2 May 2021', 'RR', 4),
(29, 'DC vs PK', 'Indian Premier League 2021', '2 May 2021', 'PK', 3),
(30, 'RCB vs KKR', 'Indian Premier League 2021', '3 May 2021', 'KKR', 3),
(31, 'MI vs SRH', 'Indian Premier League 2021', '4 May 2021', 'SRH', 4),
(32, 'CSK vs RR', 'Indian Premier League 2021', '5 May 2021', 'CSK', 4),
(33, 'PK vs RCB', 'Indian Premier League 2021', '6 May 2021', 'RCB', 7),
(34, 'CSK vs SRH', 'Indian Premier League 2021', '7 May 2021', 'CSK', 8),
(35, 'DC vs KKR', 'Indian Premier League 2021', '8 May 2021', 'DC', 7),
(36, 'MI vs RR', 'Indian Premier League 2021', '8 May 2021', 'MI', 8),

```
(37, 'PK vs CSK', 'Indian Premier League 2021', '9 May 2021', 'PK', 7),
(38, 'SRH vs RCB', 'Indian Premier League 2021', '9 May 2021', 'SRH', 8),
(39, 'KKR vs MI', 'Indian Premier League 2021', '10 May 2021', 'MI', 7),
(40, 'RR vs DC', 'Indian Premier League 2021', '11 May 2021', 'DC', 8),
(41, 'KKR vs CSK', 'Indian Premier League 2021', '12 May 2021', 'CSK', 7),
(42, 'PK vs MI', 'Indian Premier League 2021', '13 May 2021', 'PK', 7),
(43, 'RR vs SRH', 'Indian Premier League 2021', '13 May 2021', 'RR', 8),
(44, 'DC vs RCB', 'Indian Premier League 2021', '14 May 2021', 'RCB', 7),
(45, 'PK vs KKR', 'Indian Premier League 2021', '15 May 2021', 'KKR', 8),
(46, 'RCB vs RR', 'Indian Premier League 2021', '16 May 2021', 'RR', 7),
(47, 'MI vs CSK', 'Indian Premier League 2021', '16 May 2021', 'MI', 8),
(48, 'SRH vs DC', 'Indian Premier League 2021', '17 May 2021', 'DC', 6),
(49, 'RR vs KKR', 'Indian Premier League 2021', '18 May 2021', 'KKR', 5),
(50, 'PK vs SRH', 'Indian Premier League 2021', '19 May 2021', 'SRH', 5),
(51, 'RCB vs MI', 'Indian Premier League 2021', '20 May 2021', 'MI', 6),
(52, 'SRH vs KKR', 'Indian Premier League 2021', '21 May 2021', 'SRH', 5),
(53, 'CSK vs DC', 'Indian Premier League 2021', '21 May 2021', 'CSK', 6),
(54, 'RR vs PK', 'Indian Premier League 2021', '22 May 2021', 'RR', 5),
(55, 'DC vs MI', 'Indian Premier League 2021', '23 May 2021', 'MI', 6),
(56, 'CSK vs RCB', 'Indian Premier League 2021', '23 May 2021', 'CSK', 6),
(57, 'MI vs DC', 'Indian Premier League 2021', '25 May 2021', 'MI', 3),
(58, 'SRH vs RCB', 'Indian Premier League 2021', '26 May 2021', 'RCB', 3),
(59, 'CSK vs RCB', 'Indian Premier League 2021', '28 May 2021', 'RCB', 3),
(60, 'MI vs RCB', 'Indian Premier League 2021', '30 May 2021', 'MI', 3);
```

> **INSERTING VALUES IN TABLE 4: USERS**

```
/* Please Note: Phone Numbers used are dummy */
INSERT INTO users (user_id, user_name, first_name, last_name, age, gender,
phone_number, email, password) VALUES
(1, 'user01', 'Nooruddin', 'Shaikh', 20, 'Male', 8879114831,
'nooruddin.5118032.et@mhssce.ac.in', 'PasswordOne'),
(2, 'user02', 'Arshad', 'Rangrez', 20, 'Male', 9022279078, 'arshad.5118024.et@mhssce.ac.in',
'PasswordTwo'),
(3, 'user03', 'Aamir', 'Ansari', 20, 'Male', 7715891721, 'aamir.518001.et@mhssce.ac.in',
'PasswordThree'),
(4, 'user04', 'Maithili', 'Aggarwal', 21, 'Female', 8220767084,
'maithili.aggarwal@mhssce.ac.in', 'PasswordFour'),
(5, 'user05', 'Kajal', 'Kumari', 20, 'Female', 902227392, 'kajal.kumari@mhssce.ac.in',
'PasswordFive'),
(6, 'user06', 'Mansai', 'Pendare', 23, 'Female', 8972637263, 'mansipendari7@mhssce.ac.in',
'PasswordSix'),
(7, 'user07', 'Zafar', 'Khan', 23, 'Male', 9982637630, 'zafarkhan778@mhssce.ac.in',
```

```
'PasswordSeven'),
(8, 'user08', 'Sameer', 'Ansari', 20, 'Male', 7861230935,
'sameermehboobansari@mhssce.ac.in', 'PasswordEight'),
(9, 'user09', 'Farooque', 'Shaikh', 20, 'Male', 7003451997, 'farooqueshaikh@mhssce.ac.in',
'PasswordNine'),
(10, 'user10', 'Nazneem', 'Sayyed', 22, 'Female', 9977834012,
'nazneen.sayyed.786@mhssce.ac.in', 'PasswordTen'),
(11, 'user11', 'Shadab', 'Ansari', 22, 'Male', 9567120090, 'shadabansari009@mhssce.ac.in',
'PasswordOne'),
(12, 'user12', 'Faiza', 'Dawood', 21, 'Female', 9433837690, 'faizadawood@mhssce.ac.in',
'PasswordEleven'),
(13, 'user13', 'Shabnam', 'Ranji', 22, 'Female', 9789454090, 'shabnamranji@mhssce.ac.in',
'PasswordTweleve'),
(14, 'user14', 'Zohra', 'Malik', 20, 'Female', 9667455090, 'zoharamalik@mhssce.ac.in',
'PasswordThirteen'),
(15, 'user15', 'Rahil', 'Shaikh', 21, 'Male', 8879114989, 'rahildewana@mhssce.ac.in',
'PasswordFourteen');
```

Once you followed all the codes given above, your database is ready to use, and all the tables contains some dummy values. In the next section, we will see the output and will see the TABLES and the VALUES in it. Also we will run some query to find out some interesting insights about our IPL Event.

OUTPUT

QUERY: SELECT <COLUMN NAME> FROM <TABLE NAME>

TABLE 1: LOCATION

SELECT * FROM locations LIMIT 5;

```
mysql> SELECT * FROM locations LIMIT 5;
+-------------+---------------+------------+
| location_id | location_name | capacity   |
+-------------+---------------+------------+
|           1 | Mumbai        |     132000 |
|           2 | Chennai       |     100024 |
|           3 | Ahmedabad     |      80000 |
|           4 | Delhi         |      65400 |
|           5 | Bengaluru     |      60000 |
+-------------+---------------+------------+
5 rows in set (0.09 sec)
```

TABLE 2: TEAM OWNERS

SELECT * FROM team_owners LIMIT 5;

```
mysql> SELECT * FROM team_owners LIMIT 5;
+-----------+---------------------------+-----------------+----------------------------+
| owners_id | team_name                 | owner_name      | email                      |
+-----------+---------------------------+-----------------+----------------------------+
|         1 | Mumbai Indians (MI)       | Mukesh Ambani   | mukesh.ambani@ril.com      |
|         2 | Chennai Super Kings (CSK) | N Srinivasan    | md@indiacements.co.in      |
|         3 | Sunrisers Hyderabad (SRH) | Kalanithi Maran | tvinfo@sunnetwork.in       |
|         4 | Punjab Kings (PK)         | Preity Zinta    | preityzinta@gmail.com      |
|         5 | Delhi Capitals (DC)       | Parth Jindal    | parth.jindal@jsw.in        |
+-----------+---------------------------+-----------------+----------------------------+
5 rows in set (0.04 sec)
```

TABLE 3: MATCHES

SELECT * FROM matches LIMIT 5;

```
mysql> SELECT * FROM matches LIMIT 5;
+----------+-----------+--------------------------+---------------+--------+-------------+
| match_id | title     | description              | match_date    | winner | location_id |
+----------+-----------+--------------------------+---------------+--------+-------------+
|        1 | MI vs RCB | Indian Premier League 2021 | 9 April 2021  | RCB    |           2 |
|        2 | CSK vs DC | Indian Premier League 2021 | 10 April 2021 | DC     |           1 |
|        3 | SRH vs KKR| Indian Premier League 2021 | 11 April 2021 | KKR    |           2 |
|        4 | RR vs PK  | Indian Premier League 2021 | 12 April 2021 | PK     |           1 |
|        5 | KKR vs MI | Indian Premier League 2021 | 13 April 2021 | MI     |           2 |
+----------+-----------+--------------------------+---------------+--------+-------------+
5 rows in set (0.02 sec)
```

TABLE 4: USERS

SELECT * FROM users LIMIT 5;

```
mysql> SELECT * FROM users LIMIT 5;
+---------+-----------+------------+-----------+-----+--------+--------------+---------------------------------+--------------+
| user_id | user_name | first_name | last_name | age | gender | phone_number | email                           | password     |
+---------+-----------+------------+-----------+-----+--------+--------------+---------------------------------+--------------+
|       1 | user01    | Nooruddin  | Shaikh    |  20 | Male   |   8879114831 | nooruddin.5118032.et@mhssce.ac.in | PasswordOne   |
|       2 | user02    | Arshad     | Rangrez   |  20 | Male   |   9022279078 | arshad.5118024.et@mhssce.ac.in  | PasswordTwo   |
|       3 | user03    | Aamir      | Ansari    |  20 | Male   |   7715891721 | aamir.518001.et@mhssce.ac.in    | PasswordThree |
|       4 | user04    | Maithili   | Aggarwal  |  21 | Female |   8220767084 | maithili.aggarwal@mhssce.ac.in  | PasswordFour  |
|       5 | user05    | Kajal      | Kumari    |  20 | Female |    902227392 | kajal.kumari@mhssce.ac.in       | PasswordFive  |
+---------+-----------+------------+-----------+-----+--------+--------------+---------------------------------+--------------+
5 rows in set (0.04 sec)
```

INSIGHTS

Q) Count how many times CSK has won in this IPL

SELECT COUNT(*) FROM matches WHERE winner='csk';

```
mysql> SELECT COUNT(*) FROM matches WHERE winner='csk';
+----------+
| COUNT(*) |
+----------+
|        9 |
+----------+
1 row in set (0.01 sec)
```

A) CSK won 9 times

Q) Count all the winners then sort it as per winners in descending order.

SELECT winner, COUNT(winner) FROM matches GROUP BY winner ORDER BY COUNT(winner) DESC;

```
mysql> SELECT winner, COUNT(winner) FROM matches
    -> GROUP BY winner ORDER BY COUNT(winner) DESC;
+--------+---------------+
| winner | COUNT(winner) |
+--------+---------------+
| MI     |            12 |
| CSK    |             9 |
| RCB    |             8 |
| DC     |             7 |
| SRH    |             7 |
| KKR    |             6 |
| PK     |             6 |
| RR     |             5 |
+--------+---------------+
8 rows in set (0.01 sec)
```

Q) Print all the matches that Mumbai Indians and Chennai Super Kings won in total
SELECT * FROM matches WHERE winner='MI' OR winner='CSK';

```
mysql> SELECT * FROM matches
    -> WHERE winner='MI' OR winner='CSK';
+----------+-----------+---------------------------+---------------+--------+-------------+
| match_id | title     | description               | match_date    | winner | location_id |
+----------+-----------+---------------------------+---------------+--------+-------------+
|        5 | KKR vs MI | Indian Premier League 2021 | 13 April 2021 | MI     |           2 |
|        8 | PK vs CSK | Indian Premier League 2021 | 16 April 2021 | CSK    |           1 |
|        9 | MI vs SRH | Indian Premier League 2021 | 17 April 2021 | MI     |           2 |
|       12 | CSK vs RR | Indian Premier League 2021 | 19 April 2021 | CSK    |           1 |
|       15 | KKR vs CSK | Indian Premier League 2021 | 21 April 2021 | CSK    |           1 |
|       17 | PK vs MI  | Indian Premier League 2021 | 23 April 2021 | MI     |           2 |
|       19 | CSK vs RCB | Indian Premier League 2021 | 25 April 2021 | CSK    |           1 |
|       24 | MI vs RR  | Indian Premier League 2021 | 29 April 2021 | MI     |           4 |
|       27 | MI vs CSK | Indian Premier League 2021 | 1 May 2021    | MI     |           4 |
|       32 | CSK vs RR | Indian Premier League 2021 | 5 May 2021    | CSK    |           4 |
|       34 | CSK vs SRH | Indian Premier League 2021 | 7 May 2021    | CSK    |           8 |
|       36 | MI vs RR  | Indian Premier League 2021 | 8 May 2021    | MI     |           8 |
|       39 | KKR vs MI | Indian Premier League 2021 | 10 May 2021   | MI     |           7 |
|       41 | KKR vs CSK | Indian Premier League 2021 | 12 May 2021   | CSK    |           7 |
|       47 | MI vs CSK | Indian Premier League 2021 | 16 May 2021   | MI     |           8 |
|       51 | RCB vs MI | Indian Premier League 2021 | 20 May 2021   | MI     |           6 |
|       53 | CSK vs DC | Indian Premier League 2021 | 21 May 2021   | CSK    |           6 |
|       55 | DC vs MI  | Indian Premier League 2021 | 23 May 2021   | MI     |           6 |
|       56 | CSK vs RCB | Indian Premier League 2021 | 23 May 2021   | CSK    |           6 |
|       57 | MI vs DC  | Indian Premier League 2021 | 25 May 2021   | MI     |           3 |
|       60 | MI vs RCB | Indian Premier League 2021 | 30 May 2021   | MI     |           3 |
+----------+-----------+---------------------------+---------------+--------+-------------+
21 rows in set (0.01 sec)
```

Q) Print all the dates on which Mumbai Indians have won the match
SELECT match_date FROM matches WHERE winner='MI';

```
mysql> SELECT match_date FROM matches
    -> WHERE winner='MI';
+---------------+
| match_date    |
+---------------+
| 13 April 2021 |
| 17 April 2021 |
| 23 April 2021 |
| 29 April 2021 |
| 1 May 2021    |
| 8 May 2021    |
| 10 May 2021   |
| 16 May 2021   |
| 20 May 2021   |
| 23 May 2021   |
| 25 May 2021   |
| 30 May 2021   |
+---------------+
12 rows in set (0.00 sec)
```

Q) Print all the dates on which Mumbai Indians have won the match
SELECT match_date FROM matches WHERE winner='MI';

Q) Print unique combinations of matches between two teams
SELECT DISTINCT title FROM matches;

```
mysql> SELECT DISTINCT title FROM matches;
+------------+
| title      |
+------------+
| MI vs RCB  |
| CSK vs DC  |
| SRH vs KKR |
| RR vs PK   |
| KKR vs MI  |
| SRH vs RCB |
| RR vs DC   |
| PK vs CSK  |
| MI vs SRH  |
| RCB vs KKR |
| DC vs PK   |
| CSK vs RR  |
| DC vs MI   |
| PK vs SRH  |
| KKR vs CSK |
| RCB vs RR  |
| PK vs MI   |
| RR vs KKR  |
| CSK vs RCB |
| SRH vs DC  |
| PK vs KKR  |
| DC vs RCB  |
| CSK vs SRH |
| MI vs RR   |
| DC vs KKR  |
| PK vs RCB  |
| MI vs CSK  |
| RR vs SRH  |
| RCB vs MI  |
| MI vs DC   |
+------------+
30 rows in set (0.00 sec)
```

Q) Print the first and last name of user whose age is less than 21
SELECT first_name, last_name, age FROM users HAVING age<21;

```
mysql> SELECT first_name, last_name, age
    -> FROM users HAVING age<21;
+------------+-----------+-----+
| first_name | last_name | age |
+------------+-----------+-----+
| Nooruddin  | Shaikh    |  20 |
| Arshad     | Rangrez   |  20 |
| Aamir      | Ansari    |  20 |
| Kajal      | Kumari    |  20 |
| Sameer     | Ansari    |  20 |
| Farooque   | Shaikh    |  20 |
| Zohra      | Malik     |  20 |
+------------+-----------+-----+
7 rows in set (0.01 sec)
```

Q) Count number of users based on their age
SELECT age, COUNT(age) age_count FROM users GROUP BY age ORDER BY age_count;

```
mysql> SELECT age, COUNT(age) age_count
    -> FROM users GROUP BY age
    -> ORDER BY age_count;
+-----+-----------+
| age | age_count |
+-----+-----------+
|  23 |         2 |
|  21 |         3 |
|  22 |         3 |
|  20 |         7 |
+-----+-----------+
4 rows in set (0.00 sec)
```

Q) Select all the matches which was played in the stadium having more than 1 lakh of capacity and then sort them with match dates in ascending order

SELECT * FROM matches WHERE location_id IN
    (SELECT location_id from locations WHERE capacity>100000
) ORDER BY match_date;

```
mysql> SELECT * FROM matches WHERE location_id IN
    -> (SELECT location_id from locations WHERE capacity>100000)
    -> ORDER BY match_date;
+----------+------------+----------------------------+---------------+--------+-------------+
| match_id | title      | description                | match_date    | winner | location_id |
+----------+------------+----------------------------+---------------+--------+-------------+
|        2 | CSK vs DC  | Indian Premier League 2021 | 10 April 2021 | DC     |           1 |
|        3 | SRH vs KKR | Indian Premier League 2021 | 11 April 2021 | KKR    |           2 |
|        4 | RR vs PK   | Indian Premier League 2021 | 12 April 2021 | PK     |           1 |
|        5 | KKR vs MI  | Indian Premier League 2021 | 13 April 2021 | MI     |           2 |
|        6 | SRH vs RCB | Indian Premier League 2021 | 14 April 2021 | RCB    |           2 |
|        7 | RR vs DC   | Indian Premier League 2021 | 15 April 2021 | RR     |           1 |
|        8 | PK vs CSK  | Indian Premier League 2021 | 16 April 2021 | CSK    |           1 |
|        9 | MI vs SRH  | Indian Premier League 2021 | 17 April 2021 | MI     |           2 |
|       11 | DC vs PK   | Indian Premier League 2021 | 18 April 2021 | DC     |           1 |
|       10 | RCB vs KKR | Indian Premier League 2021 | 18 April 2021 | RCB    |           2 |
|       12 | CSK vs RR  | Indian Premier League 2021 | 19 April 2021 | CSK    |           1 |
|       13 | DC vs MI   | Indian Premier League 2021 | 20 April 2021 | DC     |           2 |
|       15 | KKR vs CSK | Indian Premier League 2021 | 21 April 2021 | CSK    |           1 |
|       14 | PK vs SRH  | Indian Premier League 2021 | 21 April 2021 | SRH    |           2 |
|       16 | RCB vs RR  | Indian Premier League 2021 | 22 April 2021 | RCB    |           1 |
|       17 | PK vs MI   | Indian Premier League 2021 | 23 April 2021 | MI     |           2 |
|       18 | RR vs KKR  | Indian Premier League 2021 | 24 April 2021 | KKR    |           1 |
|       19 | CSK vs RCB | Indian Premier League 2021 | 25 April 2021 | CSK    |           1 |
|       20 | SRH vs DC  | Indian Premier League 2021 | 25 April 2021 | SRH    |           2 |
|        1 | MI vs RCB  | Indian Premier League 2021 | 9 April 2021  | RCB    |           2 |
+----------+------------+----------------------------+---------------+--------+-------------+
20 rows in set (0.00 sec)
```

As we have seen, one can use SQL to get many such insights and using such information one can plan their strategy and execute. The plus point of SQL is it is easy to use and much faster even with millions of rows and columns.

<u>CONCLUSION</u>

Working on this project we got the understanding about table creation, database creation, primary key, the aggregate functions like COUNT, sub-queries, and how to use our database development project in a real world. We also implemented some of the useful functions on our database to extract useful insights. It also provides knowledge about the latest technology used in developing web enabled application and client server technology that will be great demand in future. This will provide better opportunities and guidance in future in developing projects independently.

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