-- 1.Database Creation

```sql
CREATE TABLE Events (

  Event_Id VARCHAR (10) PRIMARY KEY,

  Event_Name VARCHAR (100),

  Event_Date Date,

  Event_Location VARCHAR (100),

  Event_Description VARCHAR (100)

);
CREATE TABLE Attendees (

  Attendee_Id VARCHAR (10) PRIMARY KEY,

  Attendee_Name VARCHAR (100),

  Attendee_Phone NUMERIC(10, 0),

  Attendee_Email VARCHAR(100),

  Attendee_City VARCHAR (100)

);
CREATE TABLE Registrations (

    Registration_id SERIAL PRIMARY KEY,

    Event_Id VARCHAR(10),

    Attendee_Id VARCHAR(10),

    Registration_Date DATE,

    Registration_Amount NUMERIC(10, 0),


    FOREIGN KEY (Event_Id) REFERENCES Events(Event_Id),

    FOREIGN KEY (Attendee_Id) REFERENCES Attendees(Attendee_Id)

);
```

```sql
-- 2.Data Creation


INSERT INTO Events (Event_Id, Event_Name, Event_Date, Event_Location, Event_Description)

VALUES ('E01', 'Tech Conference 2025', '2025-11-25', 'Bangalore', 'tech conference on AI and ML'),

('E02', 'Marketing Workshop', '2025-11-05', 'Mumbai', 'A 2-day digital marketing intensive'),

('E03', 'Startup Pitch Day', '2025-11-18', 'DELHI', 'Showcasing top new startups'),

('E04', 'Cloud Computing Seminar', '2025-12-15', 'Pune', 'Deep dive into AWS and Azure platforms'),

('E05', 'Design Thinking Meetup', '2025-12-7', 'Hyderabad', 'Creative problem-solving session');


INSERT INTO Attendees (Attendee_Id, Attendee_Name, Attendee_Phone, Attendee_Email, Attendee_City)

VALUES ('A11', 'Rahul', 9876543210, 'rahul.amazon.com', 'Bangalore'),

('A12', 'Priya', 9123456789, 'priya.amazon.com', 'Mumbai'),

('A13', 'Amit', 9988776655, 'amit.amazon.com', 'DELHI'),

('A14', 'Neha', 9001122334, 'neha.amazon.com', 'Pune'),

('A15', 'Vikram', 8899001122, 'vikram.amazon.com', 'Hyderabad');


INSERT INTO Registrations (Event_Id, Attendee_Id, Registration_Date, Registration_Amount)

VALUES ('E01', 'A11', '2025-09-20', 1000.00), -- Rahul registered for Tech Conference

('E01', 'A12', '2025-09-21', 1000.00), -- Priya registered for Tech Conference

('E02', 'A12', '2025-10-15', 800.00),  -- Priya also registered for Marketing Workshop

('E03', 'A13', '2025-10-30', 600.00),   -- Amit registered for the  Pitch Day

('E04', 'A14', '2025-11-01',900.00),  -- Neha registered for Cloud Seminar

('E05', 'A15', '2025-11-10', 500.00);  -- Vikram registered for Design Meetup


SELECT * FROM Events;
```

Output:

```
CREATE TABLE
CREATE TABLE
CREATE TABLE
INSERT 0 5
INSERT 0 5
INSERT 0 6
 event_id |      event_name       | event_date | event_location |           event_description
----------+-----------------------+------------+----------------+-------------------------------------
 E01      | Tech Conference 2025  | 2025-11-25 | Bangalore      | tech conference on AI and ML
 E02      | Marketing Workshop    | 2025-11-05 | Mumbai         | A 2-day digital marketing intensive
 E03      | Startup Pitch Day     | 2025-11-18 | DELHI          | Showcasing top new startups
 E04      | Cloud Computing Seminar | 2025-12-15 | Pune         | Deep dive into AWS and Azure platforms
 E05      | Design Thinking Meetup | 2025-12-07 | Hyderabad     | Creative problem-solving session
(5 rows)
```

SELECT * FROM Attendees;

```
 attendee_id | attendee_name | attendee_phone |   attendee_email    | attendee_city
-------------+---------------+----------------+---------------------+---------------
 A11         | Rahul         |     9876543210 | rahul.amazon.com    | Bangalore
 A12         | Priya         |     9123456789 | priya.amazon.com    | Mumbai
 A13         | Amit          |     9988776655 | amit.amazon.com     | DELHI
 A14         | Neha          |     9001122334 | neha.amazon.com     | Pune
 A15         | Vikram        |     8899001122 | vikram.amazon.com   | Hyderabad
(5 rows)
```

SELECT * FROM Registrations;

```
 registration_id | event_id | attendee_id | registration_date | registration_amount
-----------------+----------+-------------+-------------------+---------------------
               1 | E01      | A11         | 2025-09-20        |                1000
               2 | E01      | A12         | 2025-09-21        |                1000
               3 | E02      | A12         | 2025-10-15        |                 800
               4 | E03      | A13         | 2025-10-30        |                 600
               5 | E04      | A14         | 2025-11-01        |                 900
               6 | E05      | A15         | 2025-11-10        |                 500
(6 rows)
```

-- 3. Manage Event Details a) Inserting a new event.

INSERT INTO Events (Event_Id, Event_Name, Event_Date, Event_Location, Event_Description)

VALUES ('E06', 'Data Science Bootcamp', '2026-01-15', 'Chennai', 'A training session on Python');

--b) Updating an event's information.

```
UPDATE Events

SET

    Event_Location = 'Bangalore',

    Event_Description = 'A 2-day digital marketing intensive, moved to a new city.'

WHERE

    Event_Id = 'E02';
```

```
INSERT 0 1
UPDATE 1
ALTER TABLE
ALTER TABLE
DELETE 1
 event_id |       event_name       | event_date | event_location |                 event_description
----------+------------------------+------------+----------------+----------------------------------------------------
 E01      | Tech Conference 2025   | 2025-11-25 | Bangalore      | tech conference on AI and ML
 E03      | Startup Pitch Day      | 2025-11-18 | DELHI          | Showcasing top new startups
 E04      | Cloud Computing Seminar| 2025-12-15 | Pune           | Deep dive into AWS and Azure platforms
 E06      | Data Science Bootcamp  | 2026-01-15 | Chennai        | A training session on Python
 E02      | Marketing Workshop     | 2025-11-05 | Bangalore      | A 2-day digital marketing intensive, moved to a new city.
(5 rows)
```

-- c) Deleting an event.

```
ALTER TABLE Registrations DROP CONSTRAINT registrations_event_id_fkey;


ALTER TABLE Registrations

ADD CONSTRAINT registrations_event_id_fkey

FOREIGN KEY (Event_Id) REFERENCES Events(Event_Id) ON DELETE CASCADE;


DELETE FROM Events WHERE Event_Id = 'E05';


SELECT * FROM Events;

SELECT * FROM Attendees;

SELECT * FROM Registrations;
```

```
 event_id |      event_name       | event_date | event_location |                event_description
----------+-----------------------+------------+----------------+-------------------------------------------------
 E01      | Tech Conference 2025  | 2025-11-25 | Bangalore      | tech conference on AI and ML
 E03      | Startup Pitch Day     | 2025-11-18 | DELHI          | Showcasing top new startups
 E04      | Cloud Computing Seminar | 2025-12-15 | Pune         | Deep dive into AWS and Azure platforms
 E06      | Data Science Bootcamp | 2026-01-15 | Chennai        | A training session on Python
 E02      | Marketing Workshop    | 2025-11-05 | Bangalore      | A 2-day digital marketing intensive, moved to a new city.
(5 rows)

 attendee_id | attendee_name | attendee_phone |   attendee_email   | attendee_city
-------------+---------------+----------------+--------------------+---------------
 A11         | Rahul         |     9876543210 | rahul.amazon.com   | Bangalore
 A12         | Priya         |     9123456789 | priya.amazon.com   | Mumbai
 A13         | Amit          |     9988776655 | amit.amazon.com    | DELHI
 A14         | Neha          |     9001122334 | neha.amazon.com    | Pune
 A15         | Vikram        |     8899001122 | vikram.amazon.com  | Hyderabad
(5 rows)

 registration_id | event_id | attendee_id | registration_date | registration_amount
-----------------+----------+-------------+-------------------+---------------------
               1 | E01      | A11         | 2025-09-20        |                1000
               2 | E01      | A12         | 2025-09-21        |                1000
               3 | E02      | A12         | 2025-10-15        |                 800
               4 | E03      | A13         | 2025-10-30        |                 600
               5 | E04      | A14         | 2025-11-01        |                 900
(5 rows)
```

-- 4) Manage Track Attendees & Handle Events : a) Inserting a new attendee.

INSERT INTO Attendees (Attendee_Id, Attendee_Name, Attendee_Phone, Attendee_Email, Attendee_City)

VALUES ('A16', 'Suresh Menon', 7654327898, 'suresh.amazon.com', 'Chennai');

-- b) Registering an attendee for an event.

INSERT INTO Registrations (Event_Id, Attendee_Id, Registration_Date, Registration_Amount)

VALUES ('E01', 'A16', CURRENT_DATE, 1000.00);

SELECT * FROM Events;

SELECT * FROM Attendees;

SELECT * FROM Registrations;

```
INSERT 0 1
INSERT 0 1
 event_id |       event_name        | event_date | event_location |                    event_description
----------+-------------------------+------------+----------------+------------------------------------------------------
 E01      | Tech Conference 2025    | 2025-11-25 | Bangalore      | tech conference on AI and ML
 E03      | Startup Pitch Day       | 2025-11-18 | DELHI          | Showcasing top new startups
 E04      | Cloud Computing Seminar | 2025-12-15 | Pune           | Deep dive into AWS and Azure platforms
 E06      | Data Science Bootcamp   | 2026-01-15 | Chennai        | A training session on Python
 E02      | Marketing Workshop      | 2025-11-05 | Bangalore      | A 2-day digital marketing intensive, moved to a new city.
(5 rows)

 attendee_id | attendee_name | attendee_phone |   attendee_email   | attendee_city
-------------+---------------+----------------+--------------------+---------------
 A11         | Rahul         |     9876543210 | rahul.amazon.com   | Bangalore
 A12         | Priya         |     9123456789 | priya.amazon.com   | Mumbai
 A13         | Amit          |     9988776655 | amit.amazon.com    | DELHI
 A14         | Neha          |     9001122334 | neha.amazon.com    | Pune
 A15         | Vikram        |     8899001122 | vikram.amazon.com  | Hyderabad
 A16         | Suresh Menon  |     7654327898 | suresh.amazon.com  | Chennai
(6 rows)

 registration_id | event_id | attendee_id | registration_date | registration_amount
-----------------+----------+-------------+-------------------+---------------------
               1 | E01      | A11         | 2025-09-20        |                1000
               2 | E01      | A12         | 2025-09-21        |                1000
               3 | E02      | A12         | 2025-10-15        |                 800
               4 | E03      | A13         | 2025-10-30        |                 600
               5 | E04      | A14         | 2025-11-01        |                 900
               7 | E01      | A16         | 2025-12-03        |                1000
(6 rows)
```

-- 5.Develop queries to retrieve event information, generate attendee lists, and calculate event attendance statistics

SELECT

   E.Event_Name,

   E.Event_Date,

   R.Registration_Amount,

   A.Attendee_Name

FROM

   Registrations R

JOIN

   Events E ON R.Event_Id = E.Event_Id

JOIN

   Attendees A ON R.Attendee_Id = A.Attendee_Id

ORDER BY

   Event_Date ASC;

SELECT

   Attendee_City,

```
    COUNT(Attendee_Id) AS Number_of_Attendees

FROM

    Attendees

GROUP BY

    Attendee_City

ORDER BY

    Number_of_Attendees DESC;
```

```
      event_name       | event_date | registration_amount | attendee_name
-----------------------+------------+---------------------+---------------
 Marketing Workshop    | 2025-11-05 |                 800 | Priya
 Startup Pitch Day     | 2025-11-18 |                 600 | Amit
 Tech Conference 2025  | 2025-11-25 |                1000 | Rahul
 Tech Conference 2025  | 2025-11-25 |                1000 | Priya
 Tech Conference 2025  | 2025-11-25 |                1000 | Suresh Menon
 Cloud Computing Seminar | 2025-12-15 |               900 | Neha
(6 rows)

 attendee_city | number_of_attendees
---------------+---------------------
 Chennai       |                   1
 DELHI         |                   1
 Hyderabad     |                   1
 Bangalore     |                   1
 Mumbai        |                   1
 Pune          |                   1
(6 rows)
```