CASE_STUDY

LIST OF TABLES: 1. User table

2. Train table

3. Ticket table

4. Booking table

1.USER TABLE –

```sql
1   use case_study;
2   -- Create the USER table
3   CREATE TABLE USER (
4       UserId INT PRIMARY KEY,
5       UserName VARCHAR(255),
6       Age INT,
7       Gender VARCHAR(10),
8       Phone VARCHAR(15),
9       Address VARCHAR(255)
10  );
11  -- Insert sample values into the USER table
12  INSERT INTO USER (UserId, UserName, Age, Gender, Phone, Address)
13  VALUES
14      (1, 'kavya', 30, 'Male', '123-456-7890', '123 Main St'),
15      (2, 'thanya', 25, 'Female', '987-654-3210', '456 Elm St');
16
17  select * from USER;
```
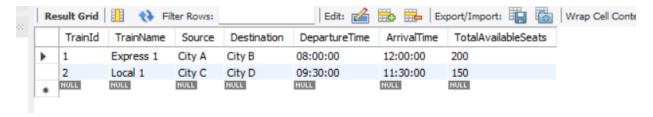
Output-

UserId	UserName	Age	Gender	Phone	Address
1	kavya	30	Male	123-456-7890	123 Main St
2	thanya	25	Female	987-654-3210	456 Elm St
NULL	NULL	NULL	NULL	NULL	NULL

2. TRAIN TABLE –

```sql
19 ●⊖  CREATE TABLE TRAIN (
20          TrainId INT PRIMARY KEY,
21          TrainName VARCHAR(255),
22          Source VARCHAR(255),
23          Destination VARCHAR(255),
24          DepartureTime TIME,
25          ArrivalTime TIME,
26          TotalAvailableSeats INT
27      );
28      -- Insert sample values into the TRAIN table
29 ●    INSERT INTO TRAIN (TrainId, TrainName, Source, Destination, DepartureTime, ArrivalTime, TotalAvailableSea
30      VALUES
31          (1, 'Express 1', 'City A', 'City B', '08:00:00', '12:00:00', 200),
32          (2, 'Local 1', 'City C', 'City D', '09:30:00', '11:30:00', 150);
33
34 ●    select * from TRAIN;
35
```

Output:

TrainId	TrainName	Source	Destination	DepartureTime	ArrivalTime	TotalAvailableSeats
1	Express 1	City A	City B	08:00:00	12:00:00	200
2	Local 1	City C	City D	09:30:00	11:30:00	150
NULL	NULL	NULL	NULL	NULL	NULL	NULL

3. TICKET TABLE –

```sql
37 ●⊖  CREATE TABLE TICKET (
38          TicketId INT PRIMARY KEY,
39          UserId INT,
40          TrainId INT,
41          PNRNumber VARCHAR(20),
42          TravelDate DATE,
43          TotalFare DECIMAL(10, 2),
44          FOREIGN KEY (UserId) REFERENCES USER(UserId),
45          FOREIGN KEY (TrainId) REFERENCES TRAIN(TrainId)
46      );
47      -- Insert sample values into the TICKET table
48 ●    INSERT INTO TICKET (TicketId, UserId, TrainId, PNRNumber, TravelDate, TotalFare)
49      VALUES
50          (1, 1, 1, 'ABC123', '2023-11-15', 50.00),
51          (2, 2, 2, 'XYZ456', '2023-11-20', 35.50);
52
53 ●    select * from TICKET;
```

Output:

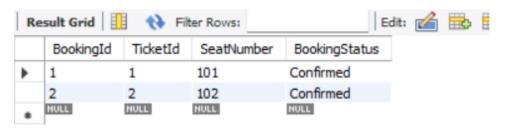| TicketId	UserId	TrainId	PNRNumber	TravelDate	TotalFare
1	1	1	ABC123	2023-11-15	50.00
2	2	2	XYZ456	2023-11-20	35.50
NULL	NULL	NULL	NULL	NULL	NULL

4. BOOKING TABLE –

```
54      -- Create the BOOKING table
55   ⊖ CREATE TABLE BOOKING (
56          BookingId INT PRIMARY KEY,
57          TicketId INT,
58          SeatNumber INT,
59          BookingStatus VARCHAR(20),
60          FOREIGN KEY (TicketId) REFERENCES TICKET(TicketId)
61      );
62
63      -- Insert sample values into the BOOKING table
64   INSERT INTO BOOKING (BookingId, TicketId, SeatNumber, BookingStatus)
65   VALUES
66      (1, 1, 101, 'Confirmed'),
67      (2, 2, 102, 'Confirmed');
68
69   select * from BOOKING;
```

Output:

BookingId	TicketId	SeatNumber	BookingStatus
1	1	101	Confirmed
2	2	102	Confirmed
NULL	NULL	NULL	NULL

ER-Diagram generated in Mysql Workbench :

user
- 🔑 UserId INT
- ◇ UserName VARCHAR(255)
- ◇ Age INT
- ◇ Gender VARCHAR(10)
- ◇ Phone VARCHAR(15)
- ◇ Address VARCHAR(255)
- Indexes ▶

ticket
- 🔑 TicketId INT
- ◇ UserId INT
- ◇ TrainId INT
- ◇ PNRNumber VARCHAR(20)
- ◇ TravelDate DATE
- ◇ TotalFare DECIMAL(10,2)
- Indexes ▶

booking
- 🔑 BookingId INT
- ◇ TicketId INT
- ◇ SeatNumber INT
- ◇ BookingStatus VARCHAR(20)
- Indexes ▶

train
- 🔑 TrainId INT
- ◇ TrainName VARCHAR(255)
- ◇ Source VARCHAR(255)
- ◇ Destination VARCHAR(255)
- ◇ DepartureTime TIME
- ◇ ArrivalTime TIME
- ◇ TotalAvailableSeats INT
- Indexes ▶