

DBMS Project

Flight Booking Management System

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Class: CSE C2

Semester: 5th

```
mysql> CREATE DATABASE IF NOT EXISTS FlightBookingDB;  
Query OK, 1 row affected (0.00 sec)  
  
mysql> USE FlightBookingDB;  
Database changed
```

```

mysql> CREATE TABLE Airline (
->   AirlineID INT PRIMARY KEY,
->   Name VARCHAR(255) NOT NULL,
->   ContactInfo VARCHAR(255)
-> );
Query OK, 0 rows affected (0.04 sec)

mysql> INSERT INTO Airline VALUES (1, 'IndiGo', 'indi_go@air.com');
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO Airline VALUES (2, 'Air India', 'air_india@air.com');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO Airline VALUES (3, 'SpiceJet', 'spicejet@air.com');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO Airline VALUES (4, 'Vistara', 'vistara@air.com');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO Airline VALUES (5, 'GoAir', 'goair@air.com');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO Airline VALUES (6, 'AirAsia', 'airasia@air.com');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO Airline VALUES (7, 'Jet Airways', 'jetairways@air.com');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO Airline VALUES (8, 'Alliance Air', 'allianceair@air.com');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO Airline VALUES (9, 'TruJet', 'trujet@air.com');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO Airline VALUES (10, 'Air Odisha', 'airodisha@air.com');
Query OK, 1 row affected (0.00 sec)

mysql> SELECT * FROM Airline;
+-----+-----+-----+
| AirlineID | Name      | ContactInfo |
+-----+-----+-----+
| 1         | IndiGo    | indi_go@air.com |
| 2         | Air India | air_india@air.com |
| 3         | SpiceJet  | spicejet@air.com |
| 4         | Vistara   | vistara@air.com |
| 5         | GoAir     | goair@air.com |
| 6         | AirAsia   | airasia@air.com |
| 7         | Jet Airways | jetairways@air.com |
| 8         | Alliance Air | allianceair@air.com |
| 9         | TruJet    | trujet@air.com |
| 10        | Air Odisha | airodisha@air.com |
+-----+-----+-----+
10 rows in set (0.01 sec)

```

```

mysql> CREATE TABLE Airport (
->   AirportID INT PRIMARY KEY,
->   Code VARCHAR(10) UNIQUE NOT NULL,
->   Name VARCHAR(255) NOT NULL,
->   Location VARCHAR(255)
-> );
Query OK, 0 rows affected (0.04 sec)

mysql> INSERT INTO Airport VALUES (1, 'DEL', 'Indira Gandhi International Airport', 'Delhi');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO Airport VALUES (2, 'BOM', 'Chhatrapati Shivaji Maharaj Airport', 'Mumbai');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO Airport VALUES (3, 'BLR', 'Kempegowda International Airport', 'Bangalore');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO Airport VALUES (4, 'HYD', 'Rajiv Gandhi International Airport', 'Hyderabad');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO Airport VALUES (5, 'MAA', 'Chennai International Airport', 'Chennai');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO Airport VALUES (6, 'PNQ', 'Pune Airport', 'Pune');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO Airport VALUES (7, 'COK', 'Cochin International Airport', 'Kochi');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO Airport VALUES (8, 'GOI', 'Dabolim Airport', 'Goa');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO Airport VALUES (9, 'AMD', 'Sardar Vallabhbhai Patel International Airport', 'Ahmedabad');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO Airport VALUES (10, 'LKO', 'Chaudhary Charan Singh Airport', 'Lucknow');
Query OK, 1 row affected (0.00 sec)

mysql> SELECT * FROM Airport;
+-----+-----+-----+-----+
| AirportID | Code | Name                                     | Location |
+-----+-----+-----+-----+
| 1         | DEL  | Indira Gandhi International Airport      | Delhi    |
| 2         | BOM  | Chhatrapati Shivaji Maharaj Airport      | Mumbai   |
| 3         | BLR  | Kempegowda International Airport         | Bangalore|
| 4         | HYD  | Rajiv Gandhi International Airport       | Hyderabad|
| 5         | MAA  | Chennai International Airport           | Chennai  |
| 6         | PNQ  | Pune Airport                           | Pune     |
| 7         | COK  | Cochin International Airport             | Kochi    |
| 8         | GOI  | Dabolim Airport                        | Goa      |
| 9         | AMD  | Sardar Vallabhbhai Patel International Airport | Ahmedabad|
| 10        | LKO  | Chaudhary Charan Singh Airport          | Lucknow  |
+-----+-----+-----+-----+
10 rows in set (0.00 sec)

```

```

mysql> CREATE TABLE Flight (
-> FlightID INT PRIMARY KEY,
-> FlightNumber VARCHAR(16) NOT NULL,
-> AirlineID INT,
-> DepartureAirport INT,
-> ArrivalAirport INT,
-> DepartureDateTime DATETIME,
-> ArrivalDateTime DATETIME,
-> AvailableSeats INT,
-> FOREIGN KEY (AirlineID) REFERENCES Airline(AirlineID),
-> FOREIGN KEY (DepartureAirport) REFERENCES Airport(AirportID),
-> FOREIGN KEY (ArrivalAirport) REFERENCES Airport(AirportID)
-> );
Query OK, 0 rows affected (0.04 sec)

mysql> INSERT INTO Flight VALUES (1, '6E123', 1, 1, 2, '2025-11-12 14:00:00', '2025-11-12 16:10:00', 150);
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO Flight VALUES (2, 'AI101', 2, 2, 3, '2025-11-13 09:00:00', '2025-11-13 11:20:00', 200);
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO Flight VALUES (3, 'SG204', 3, 3, 4, '2025-11-14 06:30:00', '2025-11-14 08:45:00', 180);
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO Flight VALUES (4, 'UK450', 4, 4, 5, '2025-11-15 18:15:00', '2025-11-15 20:30:00', 160);
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO Flight VALUES (5, 'G8632', 5, 5, 1, '2025-11-16 21:00:00', '2025-11-17 23:15:00', 170);
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO Flight VALUES (6, 'AI202', 2, 1, 3, '2025-11-17 07:45:00', '2025-11-17 10:05:00', 220);
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO Flight VALUES (7, '6E789', 1, 6, 7, '2025-11-18 12:00:00', '2025-11-18 14:05:00', 140);
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO Flight VALUES (8, 'SG303', 3, 7, 8, '2025-11-19 15:30:00', '2025-11-19 17:45:00', 130);
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO Flight VALUES (9, 'UK555', 4, 9, 10, '2025-11-20 19:00:00', '2025-11-20 21:10:00', 150);
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO Flight VALUES (10, 'AI303', 2, 10, 6, '2025-11-21 08:00:00', '2025-11-21 10:15:00', 165);
Query OK, 1 row affected (0.00 sec)

```

```
mysql> SELECT * FROM Flight;
```

FlightID	FlightNumber	AirlineID	DepartureAirport	ArrivalAirport	DepartureDateTime	ArrivalDateTime	AvailableSeats
1	6E123	1	1	2	2025-11-12 14:00:00	2025-11-12 16:10:00	150
2	AI101	2	2	3	2025-11-13 09:00:00	2025-11-13 11:20:00	200
3	SG204	3	3	4	2025-11-14 06:30:00	2025-11-14 08:45:00	180
4	UK450	4	4	5	2025-11-15 18:15:00	2025-11-15 20:30:00	160
5	G8632	5	5	1	2025-11-16 21:00:00	2025-11-17 23:15:00	170
6	AI202	2	1	3	2025-11-17 07:45:00	2025-11-17 10:05:00	220
7	6E789	1	6	7	2025-11-18 12:00:00	2025-11-18 14:05:00	140
8	SG303	3	7	8	2025-11-19 15:30:00	2025-11-19 17:45:00	130
9	UK555	4	9	10	2025-11-20 19:00:00	2025-11-20 21:10:00	150
10	AI303	2	10	6	2025-11-21 08:00:00	2025-11-21 10:15:00	165

```
10 rows in set (0.00 sec)
```

```

mysql> CREATE TABLE Passenger (
-> PassengerID INT PRIMARY KEY,
-> Name VARCHAR(255),
-> Contact VARCHAR(16),
-> PassportNumber VARCHAR(32)
-> );
Query OK, 0 rows affected (0.03 sec)

mysql> INSERT INTO Passenger VALUES (1, 'Rahul Sharma', '9811123456', 'P1233456');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO Passenger VALUES (2, 'Priya Verma', '9822045678', 'P7894562');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO Passenger VALUES (3, 'Amit Singh', '9833127890', 'P9081726');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO Passenger VALUES (4, 'Deepa Nair', '9844234567', 'P2468135');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO Passenger VALUES (5, 'Karan Mehta', '9855123459', 'P3579246');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO Passenger VALUES (6, 'Neha Gupta', '9866012345', 'P8642097');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO Passenger VALUES (7, 'Sunil Roy', '9877123450', 'P7531598');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO Passenger VALUES (8, 'Anita Desai', '9888123451', 'P1357911');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO Passenger VALUES (9, 'Vikram Patel', '9899234562', 'P2468024');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO Passenger VALUES (10, 'Sunita Joshi', '9900345673', 'P9753186');
Query OK, 1 row affected (0.00 sec)

mysql> SELECT * FROM Passenger;
+-----+-----+-----+-----+
| PassengerID | Name       | Contact | PassportNumber |
+-----+-----+-----+-----+
| 1           | Rahul Sharma | 9811123456 | P1233456       |
| 2           | Priya Verma  | 9822045678 | P7894562       |
| 3           | Amit Singh   | 9833127890 | P9081726       |
| 4           | Deepa Nair   | 9844234567 | P2468135       |
| 5           | Karan Mehta  | 9855123459 | P3579246       |
| 6           | Neha Gupta   | 9866012345 | P8642097       |
| 7           | Sunil Roy    | 9877123450 | P7531598       |
| 8           | Anita Desai  | 9888123451 | P1357911       |
| 9           | Vikram Patel | 9899234562 | P2468024       |
| 10          | Sunita Joshi | 9900345673 | P9753186       |
+-----+-----+-----+-----+
10 rows in set (0.00 sec)

```

```

mysql> CREATE TABLE Booking (
->   BookingID INT PRIMARY KEY,
->   PassengerID INT,
->   FlightID INT,
->   TravelClass VARCHAR(32),
->   BookingDate DATETIME,
->   PaymentStatus VARCHAR(20),
->   FOREIGN KEY (PassengerID) REFERENCES Passenger(PassengerID),
->   FOREIGN KEY (FlightID) REFERENCES Flight(FlightID)
-> );
Query OK, 0 rows affected (0.03 sec)

mysql> INSERT INTO Booking VALUES (1, 1, 1, 'Economy', '2025-11-10 10:00:00', 'Paid');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO Booking VALUES (2, 2, 2, 'Business', '2025-11-11 11:15:00', 'Unpaid');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO Booking VALUES (3, 3, 1, 'Economy', '2025-11-11 12:45:00', 'Paid');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO Booking VALUES (4, 4, 3, 'Economy', '2025-11-12 14:30:00', 'Paid');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO Booking VALUES (5, 5, 4, 'First Class', '2025-11-12 15:00:00', 'Paid');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO Booking VALUES (6, 6, 5, 'Economy', '2025-11-13 16:20:00', 'Unpaid');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO Booking VALUES (7, 7, 6, 'Business', '2025-11-14 18:55:00', 'Paid');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO Booking VALUES (8, 8, 3, 'Economy', '2025-11-15 09:30:00', 'Paid');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO Booking VALUES (9, 9, 7, 'Economy', '2025-11-16 20:00:00', 'Paid');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO Booking VALUES (10, 10, 8, 'Business', '2025-11-17 15:45:00', 'Unpaid');
Query OK, 1 row affected (0.00 sec)

mysql> SELECT * FROM Booking;
+-----+-----+-----+-----+-----+-----+
| BookingID | PassengerID | FlightID | TravelClass | BookingDate | PaymentStatus |
+-----+-----+-----+-----+-----+-----+
| 1 | 1 | 1 | Economy | 2025-11-10 10:00:00 | Paid |
| 2 | 2 | 2 | Business | 2025-11-11 11:15:00 | Unpaid |
| 3 | 3 | 1 | Economy | 2025-11-11 12:45:00 | Paid |
| 4 | 4 | 3 | Economy | 2025-11-12 14:30:00 | Paid |
| 5 | 5 | 4 | First Class | 2025-11-12 15:00:00 | Paid |
| 6 | 6 | 5 | Economy | 2025-11-13 16:20:00 | Unpaid |
| 7 | 7 | 6 | Business | 2025-11-14 18:55:00 | Paid |
| 8 | 8 | 3 | Economy | 2025-11-15 09:30:00 | Paid |
| 9 | 9 | 7 | Economy | 2025-11-16 20:00:00 | Paid |
| 10 | 10 | 8 | Business | 2025-11-17 15:45:00 | Unpaid |
+-----+-----+-----+-----+-----+-----+
10 rows in set (0.00 sec)

```

```

mysql> CREATE TABLE Payment (
->   PaymentID INT PRIMARY KEY,
->   BookingID INT,
->   Amount DECIMAL(10,2),
->   Method VARCHAR(32),
->   Status VARCHAR(20),
->   FOREIGN KEY (BookingID) REFERENCES Booking(BookingID)
-> );
Query OK, 0 rows affected (0.03 sec)

mysql> INSERT INTO Payment VALUES (1, 1, 5500.00, 'Card', 'Completed');
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO Payment VALUES (2, 2, 12000.00, 'Cash', 'Pending');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO Payment VALUES (3, 3, 5500.00, 'UPI', 'Completed');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO Payment VALUES (4, 4, 6000.00, 'Card', 'Completed');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO Payment VALUES (5, 5, 18000.00, 'NetBanking', 'Completed');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO Payment VALUES (6, 6, 5000.00, 'Cash', 'Pending');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO Payment VALUES (7, 7, 12500.00, 'Card', 'Completed');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO Payment VALUES (8, 8, 6000.00, 'UPI', 'Completed');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO Payment VALUES (9, 9, 5500.00, 'NetBanking', 'Completed');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO Payment VALUES (10, 10, 12000.00, 'Card', 'Pending');
Query OK, 1 row affected (0.00 sec)

mysql> SELECT * FROM Payment;

```

PaymentID	BookingID	Amount	Method	Status
1	1	5500.00	Card	Completed
2	2	12000.00	Cash	Pending
3	3	5500.00	UPI	Completed
4	4	6000.00	Card	Completed
5	5	18000.00	NetBanking	Completed
6	6	5000.00	Cash	Pending
7	7	12500.00	Card	Completed
8	8	6000.00	UPI	Completed
9	9	5500.00	NetBanking	Completed
10	10	12000.00	Card	Pending

```

10 rows in set (0.00 sec)

```

```
mysql> SELECT BookingID, Passenger.Name, FlightNumber, TravelClass, BookingDate
-> FROM Booking
-> JOIN Passenger ON Booking.PassengerID = Passenger.PassengerID
-> JOIN Flight ON Booking.FlightID = Flight.FlightID;
```

BookingID	Name	FlightNumber	TravelClass	BookingDate
1	Rahul Sharma	6E123	Economy	2025-11-10 10:00:00
2	Priya Verma	AI101	Business	2025-11-11 11:15:00
3	Amit Singh	6E123	Economy	2025-11-11 12:45:00
4	Deepa Nair	SG204	Economy	2025-11-12 14:30:00
5	Karan Mehta	UK450	First Class	2025-11-12 15:00:00
6	Neha Gupta	G8632	Economy	2025-11-13 16:20:00
7	Sunil Roy	AI202	Business	2025-11-14 18:55:00
8	Anita Desai	SG204	Economy	2025-11-15 09:30:00
9	Vikram Patel	6E789	Economy	2025-11-16 20:00:00
10	Sunita Joshi	SG303	Business	2025-11-17 15:45:00

10 rows in set (0.02 sec)

```
mysql> SELECT FlightNumber, AvailableSeats FROM Flight;
```

FlightNumber	AvailableSeats
6E123	150
AI101	200
SG204	180
UK450	160
G8632	170
AI202	220
6E789	140
SG303	130
UK555	150
AI303	165

10 rows in set (0.00 sec)


```
mysql> SELECT FlightNumber FROM Flight
-> WHERE DepartureAirport = (SELECT AirportID FROM Airport WHERE Code = 'DEL');
+-----+
| FlightNumber |
+-----+
| 6E123        |
| AI202        |
+-----+
2 rows in set (0.01 sec)
```

```
mysql> SELECT DISTINCT Passenger.Name
-> FROM Booking
-> JOIN Passenger ON Booking.PassengerID = Passenger.PassengerID
-> WHERE TravelClass = 'Business';
+-----+
| Name      |
+-----+
| Priya Verma |
| Sunil Roy  |
| Sunita Joshi |
+-----+
3 rows in set (0.00 sec)
```

```
mysql> SELECT FlightNumber, COUNT(*) AS TotalBookings
-> FROM Booking
-> JOIN Flight ON Booking.FlightID = Flight.FlightID
-> GROUP BY FlightNumber;
+-----+-----+
| FlightNumber | TotalBookings |
+-----+-----+
| 6E123        | 2             |
| 6E789        | 1             |
| AI101        | 1             |
| AI202        | 1             |
| G8632        | 1             |
| SG204        | 2             |
| SG303        | 1             |
| UK450        | 1             |
+-----+-----+
8 rows in set (0.01 sec)
```

```
mysql> SELECT Method, SUM(Amount) AS TotalAmount
-> FROM Payment
-> WHERE Status = 'Completed'
-> GROUP BY Method;
```

Method	TotalAmount
Card	24000.00
NetBanking	23500.00
UPI	11500.00

3 rows in set (0.01 sec)

```
mysql> SELECT Passenger.Name, Booking.PaymentStatus
-> FROM Booking
-> JOIN Passenger ON Booking.PassengerID = Passenger.PassengerID
-> WHERE PaymentStatus = 'Unpaid';
```

Name	PaymentStatus
Priya Verma	Unpaid
Neha Gupta	Unpaid
Sunita Joshi	Unpaid

3 rows in set (0.00 sec)

```
mysql> SELECT FlightNumber FROM Flight
-> WHERE DepartureAirport = (SELECT AirportID FROM Airport WHERE Code = 'DEL')
-> AND ArrivalAirport = (SELECT AirportID FROM Airport WHERE Code = 'BOM');
```

FlightNumber
6E123

1 row in set (0.00 sec)

```
mysql> SELECT Passenger.Name, SUM(Payment.Amount) AS TotalPaid
-> FROM Passenger
-> JOIN Booking ON Passenger.PassengerID = Booking.PassengerID
-> JOIN Payment ON Booking.BookingID = Payment.BookingID
-> WHERE Payment.Status = 'Completed'
-> GROUP BY Passenger.Name
-> HAVING TotalPaid > 10000;
```

Name	TotalPaid
Karan Mehta	18000.00
Sunil Roy	12500.00

2 rows in set (0.01 sec)

```
mysql> SELECT FlightNumber, AvailableSeats
-> FROM Flight
-> WHERE AvailableSeats > 100;
```

FlightNumber	AvailableSeats
6E123	150
AI101	200
SG204	180
UK450	160
G8632	170
AI202	220
6E789	140
SG303	130
UK555	150
AI303	165

10 rows in set (0.00 sec)

```
mysql> SELECT Airline.Name, COUNT(Flight.FlightID) AS NumberOfFlights
-> FROM Airline
-> LEFT JOIN Flight ON Airline.AirlineID = Flight.AirlineID
-> GROUP BY Airline.Name;
```

Name	NumberOfFlights
Air India	3
Air Odisha	0
AirAsia	0
Alliance Air	0
GoAir	1
IndiGo	2
Jet Airways	0
SpiceJet	2
TruJet	0
Vistara	2

10 rows in set (0.00 sec)

```
mysql> SELECT BookingID, Passenger.Name, FlightNumber, BookingDate
-> FROM Booking
-> JOIN Passenger ON Booking.PassengerID = Passenger.PassengerID
-> JOIN Flight ON Booking.FlightID = Flight.FlightID
-> WHERE BookingDate = (SELECT MAX(BookingDate) FROM Booking);
```

BookingID	Name	FlightNumber	BookingDate
10	Sunita Joshi	SG303	2025-11-17 15:45:00

1 row in set (0.00 sec)

```
mysql> SELECT Airport.Name, COUNT(*) AS Departures
-> FROM Airport
-> JOIN Flight ON Airport.AirportID = Flight.DepartureAirport
-> GROUP BY Airport.AirportID
-> ORDER BY Departures DESC
-> LIMIT 1;
```

Name	Departures
Indira Gandhi International Airport	2

1 row in set (0.00 sec)

```
mysql> SELECT DISTINCT Passenger.Name
-> FROM Booking
-> JOIN Passenger ON Booking.PassengerID = Passenger.PassengerID
-> WHERE TravelClass = 'First Class';
```

```
+-----+
| Name |
+-----+
| Karan Mehta |
+-----+
1 row in set (0.00 sec)
```

```
mysql> SELECT TravelClass, AVG(Payment.Amount) AS AvgPayment
-> FROM Booking
-> JOIN Payment ON Booking.BookingID = Payment.BookingID
-> GROUP BY TravelClass;
```

```
+-----+-----+
| TravelClass | AvgPayment |
+-----+-----+
| Business    | 12166.666667 |
| Economy     | 5583.333333 |
| First Class | 18000.000000 |
+-----+-----+
3 rows in set (0.00 sec)
```

```
mysql> SELECT FlightNumber
-> FROM Flight
-> WHERE FlightID NOT IN (SELECT DISTINCT FlightID FROM Booking);
```

```
+-----+
| FlightNumber |
+-----+
| UK555        |
| AI303        |
+-----+
2 rows in set (0.00 sec)
```

```
mysql> SELECT Passenger.Name,
->      (SELECT SUM(P.Amount)
->      FROM Booking B
->      JOIN Payment P ON B.BookingID = P.BookingID
->      WHERE B.PassengerID = Passenger.PassengerID) AS TotalPaid
-> FROM Passenger
-> WHERE (SELECT SUM(P.Amount)
->      FROM Booking B
->      JOIN Payment P ON B.BookingID = P.BookingID
->      WHERE B.PassengerID = Passenger.PassengerID) <
->      (SELECT AVG(TotalAmount) FROM (
->      SELECT SUM(P2.Amount) AS TotalAmount
->      FROM Booking B2
->      JOIN Payment P2 ON B2.BookingID = P2.BookingID
->      GROUP BY B2.PassengerID
->      ) AS Sub);
```

Name	TotalPaid
Rahul Sharma	5500.00
Amit Singh	5500.00
Deepa Nair	6000.00
Neha Gupta	5000.00
Anita Desai	6000.00
Vikram Patel	5500.00

6 rows in set (0.01 sec)

```
mysql> SELECT DISTINCT Passenger.Name
-> FROM Passenger
-> WHERE Passenger.Name LIKE 'S%'
-> AND Passenger.PassengerID IN (
->     SELECT Booking.PassengerID
->     FROM Booking
->     JOIN Payment ON Booking.BookingID = Payment.BookingID
->     WHERE Payment.Status = 'Completed'
-> );
```

Name
Sunil Roy

1 row in set (0.00 sec)

```
mysql> SELECT DISTINCT Passenger.Name
-> FROM Payment
-> JOIN Booking ON Payment.BookingID = Booking.BookingID
-> JOIN Passenger ON Booking.PassengerID = Passenger.PassengerID
-> WHERE Payment.Method = 'Card';
```

Name
Rahul Sharma
Deepa Nair
Sunil Roy
Sunita Joshi

4 rows in set (0.00 sec)

```
mysql> SELECT BookingID, Passenger.Name, FlightNumber, BookingDate
-> FROM Booking
-> JOIN Passenger ON Booking.PassengerID = Passenger.PassengerID
-> JOIN Flight ON Booking.FlightID = Flight.FlightID
-> WHERE BookingDate BETWEEN '2025-11-11' AND '2025-11-15';
```

BookingID	Name	FlightNumber	BookingDate
2	Priya Verma	AI101	2025-11-11 11:15:00
3	Amit Singh	6E123	2025-11-11 12:45:00
4	Deepa Nair	SG204	2025-11-12 14:30:00
5	Karan Mehta	UK450	2025-11-12 15:00:00
6	Neha Gupta	G8632	2025-11-13 16:20:00
7	Sunil Roy	AI202	2025-11-14 18:55:00

6 rows in set (0.00 sec)

```
mysql> SELECT Name, PassportNumber
-> FROM Passenger
-> WHERE PassportNumber LIKE 'P1%';
```

Name	PassportNumber
Rahul Sharma	P1233456
Anita Desai	P1357911

2 rows in set (0.00 sec)

```
mysql> SELECT FlightNumber, DepartureDateTime, ArrivalDateTime
-> FROM Flight
-> WHERE FlightNumber LIKE '%AI%'
-> AND DepartureDateTime > '2025-11-15 00:00:00';
```

FlightNumber	DepartureDateTime	ArrivalDateTime
AI202	2025-11-17 07:45:00	2025-11-17 10:05:00
AI303	2025-11-21 08:00:00	2025-11-21 10:15:00

2 rows in set (0.00 sec)

```
mysql> SELECT Passenger.Name,
-> COUNT(Booking.BookingID) AS TotalBookings,
-> SUM(Payment.Amount) AS TotalPayments
-> FROM Passenger
-> JOIN Booking ON Passenger.PassengerID = Booking.PassengerID
-> JOIN Payment ON Booking.BookingID = Payment.BookingID
-> GROUP BY Passenger.PassengerID
-> ORDER BY TotalPayments DESC, TotalBookings DESC;
```

Name	TotalBookings	TotalPayments
Karan Mehta	1	18000.00
Sunil Roy	1	12500.00
Priya Verma	1	12000.00
Sunita Joshi	1	12000.00
Deepa Nair	1	6000.00
Anita Desai	1	6000.00
Rahul Sharma	1	5500.00
Vikram Patel	1	5500.00
Amit Singh	1	5500.00
Neha Gupta	1	5000.00

10 rows in set (0.00 sec)

```
mysql> SELECT BookingID, Passenger.Name, FlightNumber, BookingDate, DepartureDateTime,
-> DATEDIFF(DepartureDateTime, BookingDate) AS DaysBetween
-> FROM Booking
-> JOIN Passenger ON Booking.PassengerID = Passenger.PassengerID
-> JOIN Flight ON Booking.FlightID = Flight.FlightID
-> WHERE DATEDIFF(DepartureDateTime, BookingDate) > 0
-> AND DATEDIFF(DepartureDateTime, BookingDate) < 3;
```

BookingID	Name	FlightNumber	BookingDate	DepartureDateTime	DaysBetween
1	Rahul Sharma	6E123	2025-11-10 10:00:00	2025-11-12 14:00:00	2
2	Priya Verma	AI101	2025-11-11 11:15:00	2025-11-13 09:00:00	2
3	Amit Singh	6E123	2025-11-11 12:45:00	2025-11-12 14:00:00	1
4	Deepa Nair	SG204	2025-11-12 14:30:00	2025-11-14 06:30:00	2
9	Vikram Patel	6E789	2025-11-16 20:00:00	2025-11-18 12:00:00	2
10	Sunita Joshi	SG303	2025-11-17 15:45:00	2025-11-19 15:30:00	2

6 rows in set (0.00 sec)