

Module 4) DA- Introduction SQL (Assessments- 3)

-- Create Database

```
CREATE DATABASE AirlinesDB;
```

USE AirlinesDB;

-- Create Flights Table

```
CREATE TABLE Flights (  
    FlightID INT PRIMARY KEY,  
    FlightNumber VARCHAR(10),  
    DepartureCity VARCHAR(50),  
    ArrivalCity VARCHAR(50),  
    DepartureTime DATETIME,  
    ArrivalTime DATETIME,  
    AircraftType VARCHAR(50),  
    AvailableSeats INT,  
    TicketPrice DECIMAL(10, 2),  
    AirlineName VARCHAR(50)  
);
```

-- Insert 40 Rows of Sample Data

-- Insert rows from FlightID 1 to 40

```
INSERT INTO Flights (FlightID, FlightNumber, DepartureCity, ArrivalCity,  
    DepartureTime, ArrivalTime, AircraftType, AvailableSeats, TicketPrice,  
    AirlineName)  
VALUES  
(1, 'BA123', 'London', 'New York', '2023-01-15 08:00:00', '2023-01-15 14:00:00',  
    'Boeing 777', 200, 1200.50, 'British Airways'),  
(2, 'DL456', 'New York', 'Paris', '2023-01-20 12:00:00', '2023-01-20 18:00:00',  
    'Airbus A350', 180, 1500.75, 'Delta Airlines'),  
(3, 'AF789', 'Paris', 'Amsterdam', '2023-01-25 14:30:00', '2023-01-25 16:30:00',  
    'Airbus A320', 150, 900.25, 'Air France'),  
(4, 'UA567', 'New York', 'Los Angeles', '2023-01-30 16:00:00', '2023-01-30  
    20:00:00', 'Boeing 737', 120, 1100.90, 'United Airlines'),  
(5, 'EK345', 'Dubai', 'London', '2023-02-05 18:30:00', '2023-02-05 22:30:00',  
    'Boeing 787', 220, 1300.75, 'Emirates'),  
(6, 'SQ890', 'Singapore', 'Sydney', '2023-02-10 20:00:00', '2023-02-11 02:00:00',  
    'Airbus A380', 180, 1400.25, 'Singapore Airlines'),  
(7, 'QF456', 'Sydney', 'Auckland', '2023-02-15 22:30:00', '2023-02-16 01:30:00',  
    'Boeing 787', 100, 800.50, 'Qantas'),
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(8, 'LH123', 'Frankfurt', 'Tokyo', '2023-02-20 02:00:00', '2023-02-20 10:00:00', 'Airbus A350', 300, 1800.90, 'Lufthansa'),
(9, 'TK567', 'Istanbul', 'Moscow', '2023-02-25 04:30:00', '2023-02-25 08:30:00', 'Boeing 777', 160, 1200.00, 'Turkish Airlines'),
(10, 'AA234', 'Chicago', 'Los Angeles', '2023-03-01 06:00:00', '2023-03-01 09:30:00', 'Airbus A320', 130, 950.75, 'American Airlines'),
(11, 'BA567', 'London', 'Berlin', '2023-03-20 14:30:00', '2023-03-20 17:30:00', 'Boeing 737', 110, 1100.25, 'British Airways'),
(12, 'DL789', 'Atlanta', 'Chicago', '2023-03-25 18:00:00', '2023-03-25 20:00:00', 'Airbus A330', 90, 900.75, 'Delta Airlines'),
(13, 'EK345', 'Dubai', 'Mumbai', '2023-03-30 20:30:00', '2023-03-30 23:30:00', 'Boeing 777', 200, 1200.90, 'Emirates'),
(14, 'UA567', 'New York', 'San Francisco', '2023-04-05 22:00:00', '2023-04-06 02:00:00', 'Airbus A350', 150, 1000.50, 'United Airlines'),
(15, 'SQ890', 'Singapore', 'Hong Kong', '2023-04-10 02:30:00', '2023-04-10 04:30:00', 'Airbus A380', 180, 1500.25, 'Singapore Airlines'),
(16, 'QF456', 'Sydney', 'Melbourne', '2023-04-15 04:00:00', '2023-04-15 05:30:00', 'Boeing 787', 100, 800.75, 'Qantas'),
(17, 'LH123', 'Frankfurt', 'Barcelona', '2023-04-20 06:30:00', '2023-04-20 09:00:00', 'Airbus A350', 300, 1800.25, 'Lufthansa'),
(18, 'TK567', 'Istanbul', 'Athens', '2023-04-25 08:00:00', '2023-04-25 10:00:00', 'Boeing 737', 160, 1300.90, 'Turkish Airlines'),
(19, 'AA234', 'Chicago', 'Miami', '2023-04-30 10:30:00', '2023-04-30 12:30:00', 'Airbus A320', 130, 950.50, 'American Airlines'),
(20, 'AF567', 'Paris', 'Rome', '2023-05-05 12:00:00', '2023-05-05 14:00:00', 'Airbus A330', 150, 1600.00, 'Air France'),
(21, 'BA123', 'London', 'New York', '2023-05-10 15:30:00', '2023-05-10 18:30:00', 'Boeing 777', 200, 1200.50, 'British Airways'),
(22, 'DL456', 'New York', 'Paris', '2023-05-15 18:00:00', '2023-05-15 22:00:00', 'Airbus A350', 180, 1500.75, 'Delta Airlines'),
(23, 'AF789', 'Paris', 'Amsterdam', '2023-05-20 20:30:00', '2023-05-20 22:30:00', 'Airbus A320', 150, 900.25, 'Air France'),
(24, 'UA567', 'New York', 'Los Angeles', '2023-05-25 22:00:00', '2023-05-26 02:00:00', 'Boeing 737', 120, 1100.90, 'United Airlines'),
(25, 'EK345', 'Dubai', 'London', '2023-06-01 01:30:00', '2023-06-01 05:30:00', 'Boeing 787', 220, 1300.75, 'Emirates'),
(26, 'SQ890', 'Singapore', 'Sydney', '2023-06-05 04:00:00', '2023-06-05 07:00:00', 'Airbus A380', 180, 1400.25, 'Singapore Airlines'),
(27, 'QF456', 'Sydney', 'Auckland', '2023-06-10 06:30:00', '2023-06-10 09:30:00', 'Boeing 787', 100, 800.50, 'Qantas'),
(28, 'LH123', 'Frankfurt', 'Tokyo', '2023-06-15 08:00:00', '2023-06-15 15:00:00', 'Airbus A350', 300, 1800.90, 'Lufthansa'),
(29, 'TK567', 'Istanbul', 'Moscow', '2023-06-20 12:30:00', '2023-06-20 15:30:00', 'Boeing 777', 160, 1200.00, 'Turkish Airlines'),

(30, 'AA234', 'Chicago', 'Los Angeles', '2023-06-25 16:00:00', '2023-06-25 20:00:00', 'Airbus A320', 130, 950.75, 'American Airlines'),
(31, 'BA567', 'London', 'Berlin', '2023-03-20 14:30:00', '2023-03-20 17:30:00', 'Boeing 737', 110, 1100.25, 'British Airways'),
(32, 'DL789', 'Atlanta', 'Chicago', '2023-03-25 18:00:00', '2023-03-25 20:00:00', 'Airbus A330', 90, 900.75, 'Delta Airlines'),
(33, 'EK345', 'Dubai', 'Mumbai', '2023-03-30 20:30:00', '2023-03-30 23:30:00', 'Boeing 777', 200, 1200.90, 'Emirates'),
(34, 'UA567', 'New York', 'San Francisco', '2023-04-05 22:00:00', '2023-04-06 02:00:00', 'Airbus A350', 150, 1000.50, 'United Airlines'),
(35, 'SQ890', 'Singapore', 'Hong Kong', '2023-04-10 02:30:00', '2023-04-10 04:30:00', 'Airbus A380', 180, 1500.25, 'Singapore Airlines'),
(36, 'QF456', 'Sydney', 'Melbourne', '2023-04-15 04:00:00', '2023-04-15 05:30:00', 'Boeing 787', 100, 800.75, 'Qantas'),
(37, 'LH123', 'Frankfurt', 'Barcelona', '2023-04-20 06:30:00', '2023-04-20 09:00:00', 'Airbus A350', 300, 1800.25, 'Lufthansa'),
(38, 'TK567', 'Istanbul', 'Athens', '2023-04-25 08:00:00', '2023-04-25 10:00:00', 'Boeing 737', 160, 1300.90, 'Turkish Airlines'),
(39, 'AA234', 'Chicago', 'Miami', '2023-04-30 10:30:00', '2023-04-30 12:30:00', 'Airbus A320', 130, 950.50, 'American Airlines'),
(40, 'AF567', 'Paris', 'Rome', '2023-05-05 12:00:00', '2023-05-05 14:00:00', 'Airbus A330', 150, 1600.00, 'Air France');

-- Select and Display All Rows
SELECT * FROM Flights;



- 1) Update the departure city of the flight with FlightID 5 to 'Dubai International Airport'.
- 2) Delete the flight with FlightID 10 from the Flights table.
- 3) Add a new column 'FlightStatus' with a default value of 'Scheduled'.
- 4) Drop the 'AvailableSeats' column from the Flights table.
- 5) Rename the 'FlightNumber' column to 'FlightCode' in the Flights table.
- 6) Update the ticket price of all flights with a departure city of 'London' to 1500.00.
- 7) Delete all flights that have an arrival city of 'Paris'.
- 8) Add a new column 'DepartureTerminal' with a default value of 'T1'.
- 9) Drop the 'AircraftType' column from the Flights table.
- 10) Rename the 'ArrivalTime' column to 'EstimatedArrival' in the Flights table.
- 11) Update the flight status of all flights with a departure city of 'New York' to 'Boarding'.
- 12) Delete the flight with FlightID 15 from the Flights table.
- 13) Add a new column 'DelayMinutes' with a default value of 0.
- 14) Drop the 'TicketPrice' column from the Flights table
- 15) Rename the 'DepartureCity' column to 'OriginCity' in the Flights table