Project Title: Airline Data Management and Analysis Using Power BI

Problem Statement: The airline industry operates with numerous complexities, requiring effective data management and insights into flight schedules, passenger details, and ticketing systems. This project aims to analyze airline operations for improving efficiency and customer satisfaction.

Datasets Used: Flight_Information Ticket_Information Passenger_Information

1. Flight Information: Includes FlightID, FlightNumber, Airline, Destination, and Status.

2. Passenger Information: Includes PassengerID, FlightID, and SeatNumber.

3. Ticket Information: Includes TicketID, FlightID, and BookingStatus.

Objective: To analyze and visualize airline data for operational insights, passenger management, and ticket booking trends using Power BI

1. Data Preparation and Cleaning

● Extract and transform data in Power Query.

● Cleandata: remove duplicates, handle missing values, and format columns.

● Deliverables: Screenshot of Power Query Editor showing cleaned data.

2. Data Modeling

● Create relationships between datasets (FlightID as the key).

● Understand cardinality and configure the model appropriately

3. Enhanced Data Insights

● Addaconditional column to classify flights as "Best" or "To Be Improved" based on status.

● Use"Columnfrom Examples" to extract the flight number from FlightNumber.

4. Calculations Using DAX

- **Calculate:**
    - Total passengers for a specific flight.
    - Total tickets booked. ○ Filtered table showing "Best" flights only.

5. Visualization and Interactive Features

- **Create visuals for:**
    - Passenger count by airline.
    - Ticket booking statuses.
    - Flights by airline and destination.