Please answer the following questions using Airline DB database.

**How to attempt questions:**

* Students need to write queries for the questions mentioned in the using Airline DB database
* Read the questions carefully before writing the query in **Airline Playground** (in the Playground chapter of SQL)
* Airline DB: https://www.skillovilla.com/playground/sql?exerciseId=0181e251-6ea8-4595-ae2b-0c690119f8db

**How to submit the Assignment:**

* Copy the SQL query code and paste it in the answer section in this file
* Once the assignment is done, submit the file over LMS

**Invalid Submissions:**

* Pasting pictures of the code as answer is **NOT** acceptable
* Uploading output data (CSVs) of the SQL queries is **NOT** acceptable

**Write your answers(query) in the answer and submit it. To write the answer in the assignment, please follow the below example in yellow**

Example

Questions: Extract all the columns of the flights table

Answer: SELECT \* FROM flights

**Questions:**

1. ***Represent the “book\_date” column in “yyyy-mmm-dd” format using Bookings table***

***Expected output: book\_ref, book\_date (in “yyyy-mmm-dd” format) , total amount***

**Answer:** SELECT

    EXTRACT (YEAR FROM book\_date) || '-' ||

    TO\_CHAR (book\_date, 'Mon') || '-' ||

    EXTRACT (DAY FROM book\_date)

FROM Bookings

1. **Get the following columns in the exact same sequence.**

**Expected columns in the output: ticket\_no, boarding\_no, seat\_number, passenger\_id, passenger\_name.**

**Answer:** SELECT

b.ticket\_no,

b.boarding\_no,

b.seat\_no,

t.passenger\_id,

t.passenger\_name

from boarding\_passes  b

inner join tickets  t

on b.ticket\_no=t.ticket\_no

1. **Write a query to find the seat number which is least allocated among all the seats?**

**Answer:** SELECT

seat\_no,

count(seat\_no)

from boarding\_passes

group by 1

order by 2 asc

1. ***In the database, identify the month wise highest paying passenger name and passenger id***

***Expected output: Month\_name(“mmm-yy” format), passenger\_id, passenger\_name and total amount***

**Answer:** SELECT

TO\_CHAR (b.book\_date, 'Mon') || '-' ||

EXTRACT (YEAR FROM b.book\_date) ,

t.passenger\_id,

t.passenger\_name,

sum(total\_amount) amount

from bookings b

inner join tickets t

on b.book\_ref=t.book\_ref

group by 1,2,3

order by amount desc

(OR)

WITH highest\_paying\_passengers AS (SELECT

TO\_CHAR (b.book\_date, 'Mon') || '-' ||

EXTRACT (YEAR FROM b.book\_date) as booking\_date,

t.passenger\_id,

t.passenger\_name,

sum(total\_amount) amount

from bookings b

inner join tickets t

on b.book\_ref=t.book\_ref

group by 1,2,3)

(SELECT

booking\_date,

 passenger\_id,

 passenger\_name,

amount,

Rank() over (partition by booking\_date order by amount desc) AS amt\_rank

from highest\_paying\_passengers)

where amt\_rank = 1

order by booking\_date,amt\_rank ASC

1. ***In the database, identify the month wise least paying passenger name and passenger id?***

***Expected output: Month\_name(“mmm-yy” format), passenger\_id, passenger\_name and total amount***

**Answer:** WITH highest\_paying\_passengers AS (SELECT

TO\_CHAR (b.book\_date, 'Mon') || '-' ||

EXTRACT (YEAR FROM b.book\_date) as booking\_date,

t.passenger\_id,

t.passenger\_name,

sum(total\_amount) amount

from bookings b

inner join tickets t

on b.book\_ref=t.book\_ref

group by 1,2,3)

(SELECT

booking\_date,

passenger\_id,

passenger\_name,

amount,

Rank() over (partition by booking\_date order by amount desc) AS amt\_rank

from highest\_paying\_passengers)

order by booking\_date,amt\_rank desc

**(OR)**

SELECT

TO\_CHAR (b.book\_date, 'Mon') || '-' ||

EXTRACT (YEAR FROM b.book\_date) as booking\_date,

t.passenger\_id,

t.passenger\_name,

sum(total\_amount) amount

from bookings b

inner join tickets t

on b.book\_ref=t.book\_ref

group by 1,2,3

order by booking\_date,amount asc

1. **Identify the travel details of nonstop journeys or return journeys (having more than 1 flight).**

**Expected Output: Passenger\_id, passenger\_name, ticket\_number and flight count**

**Answer:** select

t.ticket\_no,

t.passenger\_id,

t.passenger\_name,

count(f.flight\_id) as flight\_count

from tickets t

inner join ticket\_flights f

on t.ticket\_no=f.ticket\_no

group by 1,2,3

Having count(f.flight\_id)>=2

order by 4 asc

1. **How many tickets are there without boarding passes?**

**Expected Output: just one number is required**

**Answer:** select

count(t.ticket\_no)

from tickets t

LEFT join boarding\_passes b

on b.ticket\_no=t.ticket\_no

where b.ticket\_no IS NULL

1. **Identify details of the longest flight (using flights table)?**

**Expected Output: Flight number, departure airport, arrival airport, aircraft code and durations.**

**Answer:**

SELECT flight\_no, departure\_airport, arrival\_airport, aircraft\_code,

    to\_char(scheduled\_arrival, 'YYYY-MM-DD HH24:MI:SS') as arrival,

    to\_char(scheduled\_departure, 'YYYY-MM-DD HH24:MI:SS') as departure,

    arrival - departure AS duration

from flights

GROUP BY flight\_no, departure\_airport, arrival\_airport, aircraft\_code,scheduled\_arrival,scheduled\_departure

order by duration desc

limit 1

1. **Identify details of all the morning flights (morning means between 6AM to 11 AM, using flights table)?**

**Expected output: flight\_id, flight\_number, scheduled\_departure, scheduled\_arrival and timings**

**Answer:**

SELECT flight\_id,flight\_no,scheduled\_arrival,scheduled\_departure,

  to\_char(scheduled\_departure,  'HH24:MI:SS') as timings

from flights

where timings Between 6 and 11

GROUP BY flight\_id,flight\_no,scheduled\_arrival,scheduled\_departure,timings

1. ***Identify the earliest morning flight available from every airport.***

**Expected output:** **flight\_id, flight\_number, scheduled\_departure, scheduled\_arrival, departure airport and timings**

**Answer:** SELECT flight\_id,flight\_no,scheduled\_arrival,scheduled\_departure,departure\_airport,

        to\_char(scheduled\_departure,  'HH24:MI:SS') as timings

from flights

where timings Between 6 and 11

GROUP BY departure\_airport