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

book\_ref,

to\_char(book\_date, 'yyyy-mmm-dd') as book\_date,

total\_amount

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 as b

join tickets as t

on t.ticket\_no = b.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

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,'MM-YY') as book\_date,

t.passenger\_id,

t.passenger\_name,

sum(b.total\_amount) as total\_amount

from bookings as b

join tickets as t

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

group by 1, 2, 3

order by 1,

4 desc

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:**

select

to\_char(b.book\_date,'MMM-YY') as book\_date,

t.passenger\_id,

t.passenger\_name,

sum(b.total\_amount) as total\_amount

from bookings as b

join tickets as t

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

group by 1, 2, 3

order by 1,

4 asc

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

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

**Answer:**

select

t.passenger\_id,

t.passenger\_name,

t.ticket\_no,

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

from tickets as t

join ticket\_flights as tf

on tf.ticket\_no = t.ticket\_no

group by 1, 2, 3

having count(tf.flight\_id) > 1

order by 4

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

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

**Answer:**

select

count(\*) as tickets\_without\_BP

from tickets as t

join boarding\_passes as bp

on t.ticket\_no = bp.ticket\_no

where boarding\_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,

(scheduled\_arrival - scheduled\_departure) as duration

from flights

group by 1, 2, 3, 4, 5

order by 5 desc

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\_departure,

scheduled\_arrival,

extract(hours from scheduled\_departure) as timings

from flights

where extract(hours from scheduled\_departure) between 6 and 11

group by 1, 2, 3, 4, 5

order by 5 desc

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:**

WITH RankedFlights AS (

SELECT

flight\_id,

flight\_no,

scheduled\_departure,

scheduled\_arrival,

departure\_airport,

EXTRACT(HOUR FROM scheduled\_departure) AS timings,

rank() OVER (PARTITION BY departure\_airport ORDER BY scheduled\_departure) AS rn

FROM flights

WHERE EXTRACT(HOUR FROM scheduled\_departure) BETWEEN 6 AND 11

)

SELECT

flight\_id,

flight\_no,

scheduled\_departure,

scheduled\_arrival,

departure\_airport,

timings

FROM RankedFlights

WHERE rn = 1