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

1. ***Questions:******Find list of airport codes in Europe/Moscow timezone***

***Expected Output: Airport\_code***

**Answer:** SELECT

airport\_code

FROM Airports

WHERE timezone='Europe/Moscow'

1. ***Write a query to get the count of seats in various fare condition for every aircraft code?***

***Expected Outputs: Aircraft\_code, fare\_conditions ,seat count***

**Answer:** SELECT

aircraft\_code,

fare\_conditions,

count(seat\_no)

FROM Seats

GROUP BY aircraft\_code,

fare\_conditions

1. ***How many aircrafts codes have at least one Business class seats?***

***Expected Output : Count of aircraft codes***

**Answer:** : SELECT

COUNT(DISTINCT aircraft\_code)

FROM(SELECT

aircraft\_code,

fare\_conditions,

count(seat\_no)

FROM Seats

GROUP BY aircraft\_code,

fare\_conditions) AS TABLE\_1

WHERE fare\_conditions='Business'

1. ***Find out the name of the airport having maximum number of departure flight***

***Expected Output : Airport\_name***

**Answer:** SELECT

departure\_airport AS AIRPORT\_NAME,

COUNT(scheduled\_departure)

FROM Flights

GROUP BY departure\_airport

ORDER BY COUNT(scheduled\_departure) DESC

LIMIT 1

1. ***Find out the name of the airport having least number of scheduled departure flights***

***Expected Output : Airport\_name***

**Answer:** SELECT

departure\_airport AS AIRPORT\_NAME,

COUNT(scheduled\_departure)

FROM Flights

GROUP BY departure\_airport

ORDER BY COUNT(scheduled\_departure) ASC

LIMIT 1

1. ***How many flights from ‘DME’ airport don’t have actual departure?***

***Expected Output : Flight Count***

**Answer:** SELECT

COUNT(DISTINCT flight\_id)

FROM Flights

WHERE departure\_airport='DME' AND actual\_departure is NULL

1. ***Identify flight ids having range between 3000 to 6000***

***Expected Output : Flight\_Number , aircraft\_code, ranges***

**Answer:** SELECT

DISTINCT F.flight\_no,

F.aircraft\_code,

A.range

FROM Aircrafts A

JOIN Flights F

ON A.aircraft\_code=F.aircraft\_code

WHERE A.range BETWEEN 3000 AND 6000

1. ***Write a query to get the count of flights flying between URS and KUF?***

***Expected Output : Flight\_count***

**Answer:** SELECT

COUNT(DISTINCT flight\_id)

FROM Flights

WHERE departure\_airport='URS' AND arrival\_airport='KUF'

1. ***Write a query to get the count of flights flying from either from NOZ or KRR?***

***Expected Output : Flight count***

**Answer:** SELECT

COUNT(DISTINCT flight\_id)

FROM Flights

WHERE departure\_airport='NOZ' OR departure\_airport='KRR'

1. ***Write a query to get the count of flights flying from KZN,DME,NBC,NJC,GDX,SGC,VKO,ROV***

***Expected Output : Departure airport ,count of flights flying from these airports.***

**Answer:** SELECT

departure\_airport,

COUNT(DISTINCT flight\_id)

FROM Flights

WHERE departure\_airport='KZN' OR departure\_airport='DME' OR departure\_airport='NBC' OR departure\_airport='NJC' OR departure\_airport='GDX'

OR departure\_airport='SGC' OR departure\_airport='VKO' OR departure\_airport='ROV'

GROUP BY departure\_airport

1. ***Write a query to extract flight details having range between 3000 and 6000 and flying from DME***

***Expected Output :Flight\_no,aircraft\_code,range,departure\_airport***

**Answer:** SELECT

DISTINCT F.flight\_no,

A.aircraft\_code,

A.range,

F.departure\_airport

FROM Aircrafts A

JOIN Flights F

ON A.aircraft\_code=F.aircraft\_code

WHERE F.departure\_airport='DME' AND A.range BETWEEN 3000 AND 6000

1. ***Find the list of flight ids which are using aircrafts from “Airbus” company and got cancelled or delayed***

***Expected Output : Flight\_id,aircraft\_model***

**Answer:** SELECT

F.flight\_id,

A.model

FROM Flights F

INNER JOIN Aircrafts A

ON F.aircraft\_code=A.aircraft\_code

WHERE (F.status='Cancelled' or F.status='Delayed') AND A.model LIKE '%AIRBUS%'

1. ***Find the list of flight ids which are using aircrafts from “Boeing” company and got cancelled or delayed***

***Expected Output : Flight\_id,aircraft\_model***

**Answer:** SELECT

F.flight\_id,

A.model

FROM Flights F

INNER JOIN Aircrafts A

ON F.aircraft\_code=A.aircraft\_code

WHERE (F.status='Cancelled' or F.status='Delayed') AND A.model LIKE '%Boeing%'

1. ***Which airport(name) has most cancelled flights (arriving)?***

***Expected Output : Airport\_name***

**Answer:** SELECT

departure\_airport AS AIRPORT\_NAME

FROM Flights

WHERE status='Cancelled'

GROUP BY departure\_airport

ORDER BY COUNT(status) DESC

LIMIT 1

1. ***Identify flight ids which are using “Airbus aircrafts”***

***Expected Output : Flight\_id,aircraft\_model***

**Answer:** SELECT

F.flight\_id,

A.model

FROM Flights F

INNER JOIN Aircrafts A

ON F.aircraft\_code=A.aircraft\_code

WHERE A.model LIKE '%Airbus%'

1. ***Identify date-wise last flight id flying from every airport?***

***Expected Output: Flight\_id,flight\_number,schedule\_departure,departure\_airport***

**Answer:** SELECT

flight\_id,

flight\_no,

scheduled\_departure,

departure\_airport

FROM(SELECT

RANK() OVER (PARTITION BY departure\_airport ORDER BY scheduled\_departure DESC),

departure\_airport,

flight\_id,

flight\_no,

scheduled\_departure

FROM Flights) TABLE\_1

WHERE RANK=1

1. ***Identify list of customers who will get the refund due to cancellation of the flights and how much amount they will get?***

***Expected Output : Passenger\_name,total\_refund***

**Answer:** SELECT

A.passenger\_name,

B.amount AS total\_refund

FROM Tickets A

INNER JOIN (SELECT

T.ticket\_no,

F.flight\_id,

T.amount,

F.status

FROM Ticket\_Flights T

INNER JOIN  Flights F

ON T.flight\_id=F.flight\_id

WHERE F.status='Cancelled') B

ON B.ticket\_no=A.ticket\_no

1. ***Identify date wise first cancelled flight id flying for every airport?***

***Expected Output : Flight\_id,flight\_number,schedule\_departure,departure\_airport***

**Answer:** SELECT

flight\_id,

flight\_no,

scheduled\_departure,

departure\_airport

FROM(SELECT

RANK() OVER (PARTITION BY departure\_airport ORDER BY scheduled\_departure ASC),

departure\_airport,

flight\_id,

flight\_no,

scheduled\_departure

FROM Flights

WHERE status='Cancelled') TABLE\_1

WHERE RANK=1

1. ***Identify list of Airbus flight ids which got cancelled.***

***Expected Output : Flight\_id***

**Answer:** SELECT

F.flight\_id

FROM Flights F

INNER JOIN Aircrafts A

ON F.aircraft\_code=A.aircraft\_code

WHERE (F.status='Cancelled' ) AND A.model LIKE '%AIRBUS%'

**20.*Identify list of flight ids having highest range.***

***Expected Output : Flight\_no, range***

**Answer:** SELECT

F.flight\_id

FROM Flights F

INNER JOIN (SELECT aircraft\_code,range FROM Aircrafts order BY range desc LIMIT 1) A

ON F.aircraft\_code=A.aircraft\_code