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) seat\_count

from seats

group by 1,2

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 seats

WHERE fare\_conditions = 'Business'

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

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

**Answer:** select a.airport\_name,max(departure\_airport)

from airports a

inner join flights f

on f.departure\_airport=a.airport\_code

group by 1

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

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

**Answer:** select a.airport\_name,min(f.scheduled\_departure)

from airports a

inner join flights f

on f.departure\_airport=a.airport\_code

group by 1

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

***Expected Output : Flight Count***

**Answer:** select count(flight\_id)

from flights

where actual\_departure is null and departure\_airport ='DME'

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

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

**Answer:** select distinct f.flight\_no,a.aircraft\_code,a.range

from aircrafts a

inner join flights f

on f.aircraft\_code=a.aircraft\_code

group  by 1,2,3

having 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(\*) as Flight\_count

FROM

flights

WHERE

departure\_airport IN ('URS','KUF') AND arrival\_airport IN ('URS','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(flight\_id)

from flights

where departure\_airport IN ('KZN','DME','NBC','NJC','GDX','SGC','VKO','ROV')

group by 1

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 f.flight\_no,f.aircraft\_code,f.departure\_airport,a.range

from flights f

inner join aircrafts a

on f.aircraft\_code=a.aircraft\_code

group by 1,2,3,4

having range between 3000 and 6000 and departure\_airport ='DME'

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 a.model like'%Airbus%' and status ='Delayed'or status ='Cancelled'

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 a.model like'%Boeing%' and status ='Delayed'or status ='Cancelled'

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

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

**Answer:** SELECT

Airport\_name

FROM (

SELECT

A.airport\_name::json->>'en' as Airport\_name,

COUNT(F.flight\_id) as total\_cancelled\_flights

FROM flights F

INNER JOIN airports A

ON A.airport\_code = F.arrival\_airport

WHERE Status = 'Cancelled'

GROUP BY 1) temp1

ORDER BY total\_cancelled\_flights 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 aircrafts a

inner join  flights f

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,

row\_number()over(partition by actual\_departure)

from flights

order by 1 desc

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 t.passenger\_name,tf.amount as total\_refund,f.status

from ticket\_flights tf

inner join tickets t

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

inner join flights f

on f.flight\_id=tf.flight\_id

where f.status='Cancelled'

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,

rank()over(partition by scheduled\_departure)

from flights

where status ='Cancelled'

order by 1 asc

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 a.model like'%Airbus%' and f.status='Cancelled'

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

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

**Answer:** select f.flight\_no,a.range

from aircrafts a

left join  flights f

on f.aircraft\_code=a.aircraft\_code

order by 2 desc