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

distinct 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 1, 2

order by 1

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

departure\_airport as airport\_name

from flights

group by 1

order by count(distinct 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

from flights

group by 1

order by count(distinct scheduled\_departure) asc

limit 1

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

***Expected Output : Flight Count***

**Answer:**

select

count(\*)

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

f.flight\_no,

a.aircraft\_code,

a.range

from flights as f

join aircrafts as a

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

where a.range between 3000 and 6000

group by 1, 2

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 = '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(\*)

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(\*)

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,

a.aircraft\_code,

a.range,

f.departure\_airport

from flights as f

join aircrafts as a

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

where a.range between 3000 and 6000 and departure\_airport = 'DME'

group by 1, 2, 4

order by 3

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 as aircraft\_model

from flights as f

join aircrafts as a

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

where a.model like '%Airbus%' and f.status in ('Cancelled', 'Delayed')

group by 1, 2

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 as aircraft\_model

from flights as f

join aircrafts as a

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

where a.model like '%Boeing%' and f.status in ('Cancelled', 'Delayed')

group by 1, 2

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

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

**Answer:**

select

a.airport\_name

from airports as a

left join flights as f

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

where f.status = 'Cancelled'

group by 1

order by count(f.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 as aircraft\_model

from flights as f

join aircrafts as a

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

where a.model like '%Airbus%'

group by 1, 2

order by 1

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

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

**Answer:**

with LastFlights as (

SELECT

flight\_id,

flight\_no,

scheduled\_departure,

departure\_airport,

row\_number() over (partition by departure\_airport order by scheduled\_departure desc) as RowNum

from flights

)

SELECT

flight\_id,

flight\_no,

scheduled\_departure,

departure\_airport

FROM LastFlights

WHERE RowNum = 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

t.passenger\_name,

sum(tf.amount)

from tickets as t

left join ticket\_flights as tf

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

join flights as f

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

where f.status = 'Cancelled'

group by 1

order by 1

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

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

**Answer:**

with FirstFlights as (

SELECT

flight\_id,

flight\_no,

scheduled\_departure,

departure\_airport,

row\_number() over (partition by departure\_airport order by scheduled\_departure asc) as RowNum

from flights

)

SELECT

flight\_id,

flight\_no,

scheduled\_departure,

departure\_airport

FROM FirstFlights

WHERE RowNum = 1

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

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

**Answer:**

select

f.flight\_id

from flights as f

join aircrafts as a

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

where a.model like '%Airbus%'

group by 1

order by 1

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

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

**Answer:**

select

f.flight\_no,

sum(a.range) as total\_range

from flights as f

join aircrafts as a

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

group by 1

order by 2 desc