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) as seat\_count**

**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 Airport\_name**

**from flights**

**group by 1**

**order by count(flight\_no) 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 Airport\_name**

**from flights**

**group by 1**

**order by count(flight\_no)**

**limit 1**

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

***Expected Output : Flight Count***

**Answer:**

**select count(flight\_no)**

**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, f.aircraft\_code, a.range**

**from flights f**

**left join aircrafts a**

**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(flight\_no) 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(flight\_id)**

**from flights**

**where departure\_airport in ('NOZ','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 count(flight\_id)**

**from flights**

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

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

**from flights f**

**inner join aircrafts a**

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

**where 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 flight\_id, model as aircraft\_model**

**from flights f**

**inner join aircrafts a**

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

**where model like '%Airbus%'**

**and**

**status in('Cancelled','Delayed')**

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 flight\_id, model as aircraft\_model**

**from flights f**

**inner join aircrafts a**

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

**where model like '%Boeing%'**

**and**

**status in('Cancelled','Delayed')**

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

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

**Answer:**

**with cancelled\_flights as (select airport\_name, flight\_no from airports a**

**inner join flights f**

**on f.arrival\_airport = a.airport\_code**

**where status = 'Cancelled')**

**select airport\_name, count(flight\_no) flight\_count**

**from cancelled\_flights**

**group by 1**

**order by 2 desc**

**limit 2**

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

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

**Answer:**

**select flight\_id, model aircraft\_model**

**from flights f**

**left join aircrafts a**

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

**where 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:**

**with table1 as (select**

**flight\_id, flight\_no, scheduled\_departure, departure\_airport,**

**dense\_rank() over(partition by departure\_airport order by scheduled\_departure desc) as ranking**

**from flights)**

**select flight\_id, flight\_no, scheduled\_departure, departure\_airport from table1**

**where ranking =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:**

**with table1 as (select \***

**from tickets t**

**full outer join ticket\_flights tf**

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

**right join (select \* from flights**

**where status = 'Cancelled') cf**

**on cf.flight\_id = tf.flight\_id)**

**select Passenger\_name, sum(amount) total\_refund**

**from table1**

**group 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 can\_table as (select \* from flights**

**where status = 'Cancelled')**

**,**

**can\_rank\_table as (select \*,**

**dense\_rank() over(partition by departure\_airport order by scheduled\_departure) as ranking**

**from can\_table)**

**select flight\_id, flight\_no, scheduled\_departure, departure\_airport**

**from can\_rank\_table**

**where ranking =1**

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

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

**Answer:**

**select flight\_id from flights f**

**left join aircrafts a**

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

**where status ='Cancelled'**

**and model like '%Airbus%'**

**There are no Airbus Flights which got cancelled.**

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

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

**Answer:**

**select flight\_no, max(range) highest\_range**

**from flights f**

**left join aircrafts a**

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

**group by 1**