

Airline Flight Management :

1. Write a query to display the average monthly ticket cost for each flight in ABC Airlines. The query should display the Flight_Id, From_location, To_Location, Month Name as "Month_Name" and average price as "Average_Price"

Display the records sorted in ascending order based on flight id and then by Month Name.

15 rows

```
select f.flight_id,f.from_location,f.to_location,monthname(fd.flight_departure_date) as  
Month_name,avg(fd.price) as Average_price from air_flight f join air_flight_details fd  
on f.flight_id=fd.flight_id group by f.flight_id,Month_name order by f.flight_id,Month_name;
```

| FLIGHT_ID | FROM_LOCATION | TO_LOCATION | MONTH_NAME | AVERAGE_PRICE |
|-----------|---------------|-------------|------------|---------------|
| 1011 | HYDERABAD | CHENNAI | APRIL | 4614.000000 |
| 1011 | HYDERABAD | CHENNAI | MAY | 3855.500000 |
| 1262 | HYDERABAD | CHENNAI | MAY | 3444.500000 |
| 1265 | CHENNAI | HYDERABAD | APRIL | 4086.000000 |
| 1265 | CHENNAI | HYDERABAD | MAY | 3303.666667 |
| 289 | CHENNAI | KOCHI | MAY | 3257.750000 |
| 3004 | BENGALURU | CHENNAI | MAY | 3319.666667 |

| | | | | |
|------|-----------|-----------|-------|-------------|
| 3013 | CHENNAI | BENGALURU | MAY | 3257.750000 |
| 3148 | CHENNAI | BENGALURU | JUNE | 2773.000000 |
| 3148 | CHENNAI | BENGALURU | MAY | 3052.000000 |
| 3241 | CHENNAI | KOCHI | MAY | 3303.666667 |
| 3244 | KOCHI | CHENNAI | MAY | 3371.500000 |
| 3307 | BENGALURU | CHENNAI | MAY | 3309.000000 |
| 916 | CHENNAI | HYDERABAD | APRIL | 4086.000000 |
| 916 | CHENNAI | HYDERABAD | MAY | 3570.666667 |

2. Write a query to display the customer(s) who has/have booked least number of tickets in ABC Airlines. The Query should display profile_id, customer's first_name, Address and Number of tickets booked as "No_of_Tickets"

Display the records sorted in ascending order based on customer's first name.

1 row

```
select apf.profile_id, apf.first_name, apf.address, count(ati.ticket_id) as No_of_Tickets
from air_passenger_profile apf
join air_ticket_info ati on apf.profile_id=ati.profile_id group by apf.profile_id having
```

```
count(ati.ticket_id) <=all
```

```
(select count(ati.ticket_id) from air_passenger_profile apf
```

```
join air_ticket_info ati on apf.profile_id=ati.profile_id group by apf.profile_id) order by
```

```
first_name;
```

| PROFILE_ID | FIRST_NAME | ADDRESS | NO_OF_TICKETS |
|------------|------------|-------------------------|---------------|
| PFL008 | GANESH | 45 3RD ST, HYDERABAD-24 | 1 |

3. Write a query to display the number of flight services between locations in a month. The Query should display From_Location, To_Location, Month as "Month_Name" and number of flight services as "No_of_Services".

Hint: The Number of Services can be calculated from the number of scheduled departure dates of a flight.

The records should be displayed in ascending order based on From_Location and then by To_Location and then by month name

9 rows

```
select af.from_location, af.to_location, monthname(afd.flight_departure_date) as
Month_Name,
count(afd.flight_departure_date) as No_of_Services from air_flight af join
air_flight_details afd
on af.flight_id=afd.flight_id group by
af.from_location, af.to_location, month_name order by
from_location, to_location, month_name;
```

| FROM_LOCATION | TO_LOCATION | MONTH_NAME | NO_OF_SERVICES |
|---------------|-------------|------------|----------------|
|---------------|-------------|------------|----------------|

| | | | |
|-----------|-----------|-------|---|
| BENGALURU | CHENNAI | MAY | 7 |
| CHENNAI | BENGALURU | JUNE | 1 |
| CHENNAI | BENGALURU | MAY | 6 |
| CHENNAI | HYDERABAD | APRIL | 2 |
| CHENNAI | HYDERABAD | MAY | 6 |
| CHENNAI | KOCHI | MAY | 7 |
| HYDERABAD | CHENNAI | APRIL | 1 |
| HYDERABAD | CHENNAI | MAY | 4 |
| KOCHI | CHENNAI | MAY | 2 |

4. Write a query to display the customer(s) who has/have booked maximum number of tickets in ABC Airlines. The Query should display profile_id, customer's first_name, Address and Number of tickets booked as "No_of_Tickets"

Display the records in ascending order based on customer's first name.

1 row

```
select app.profile_id,app.first_name,app.address,count(ati.ticket_id) as No_of_Tickets
from air_passenger_profile app
```

```

join air_ticket_info ati on app.profile_id=ati.profile_id join air_flight af on ati.flight_id=af.flight_id
where af.airline_name= 'ABC Airlines' group by app.profile_id
having count(ati.ticket_id) >= all (select count(ati.ticket_id) from air_passenger_profile app
join air_ticket_info ati on app.profile_id=ati.profile_id join air_flight af on ati.flight_id=af.flight_id
where af.airline_name= 'ABC Airlines' group by app.profile_id) order by app.first_name;

```

| PROFILE_ID | FIRST_NAME | ADDRESS | NO_OF_TICKETS |
|------------|------------|-------------------------------|---------------|
| PFL009 | RAM | 119 2ND CROSS ST,ERNAKULAM-12 | 8 |

5. Write a query to display the number of tickets booked from Chennai to Hyderabad. The Query should display passenger profile_id, first_name, last_name, Flight_Id, Departure_Date and number of tickets booked as "No_of_Tickets".

Display the records sorted in ascending order based on profile id and then by flight id and then by departure date.

3 rows

```

select
ati.profile_id, app.first_name, app.last_name, ati.flight_id, ati.flight_departure_date, count(ati.ticket_id)
as No_of_Tickets from air_ticket_info ati join air_passenger_profile app on ati.profile_id=
app.profile_id join air_flight af on ati.flight_id=af.flight_id
where af.from_location='chennai' and af.to_location='hyderabad' group by ati.profile_id,
ati.flight_id, ati.flight_departure_date order by
ati.profile_id,
ati.flight_id, ati.flight_departure_date;

```

| PROFILE_ID | FIRST_NAME | LAST_NAME | FLIGHT_ID | FLIGHT_DEPARTURE_DATE | NO_OF_TICKETS |
|------------|------------|-----------|-----------|-----------------------|---------------|
| PFL001 | LATHA | SANKAR | 1265 | 2013-04-29 | 1 |
| PFL004 | AARTHI | RAMESH | 1265 | 2013-05-29 | 1 |
| PFL005 | SIVA | KUMAR | 916 | 2013-05-06 | 2 |

6. Write a query to display flight id, from location, to location and ticket price of flights whose departure is in the month of april.

3 rows

Display the records sorted in ascending order based on flight id and then by from location.

```
select af.flight_id,af.from_location,af.to_location,afd.price from air_flight
af
join air_flight_details afd on af.flight_id=afd.flight_id
where monthname(afd.flight_departure_date)='april' order by
flight_id,from_location;
```

| FLIGHT_ID | FROM_LOCATION | TO_LOCATION | PRICE |
|-----------|---------------|-------------|---------|
| 1011 | HYDERABAD | CHENNAI | 4614.00 |
| 1265 | CHENNAI | HYDERABAD | 4086.00 |
| 916 | CHENNAI | HYDERABAD | 4086.00 |

7. Write a query to display the average cost of the tickets in each flight on all scheduled dates. The query should display flight_id, from_location, to_location and Average price as "Price".

Display the records sorted in ascending order based on flight id and then by from_location and then by to_location.

11 rows

```
select af.flight_id,af.from_location,af.to_location,avg(afd.price)
from air_flight af join air_flight_details afd
on af.flight_id=afd.flight_id group by af.flight_id,af.from_location,af.to_location
order by af.flight_id,af.from_location,af.to_location;
```

| FLIGHT_ID | FROM_LOCATION | TO_LOCATION | PRICE |
|-----------|---------------|-------------|-------------|
| 1011 | HYDERABAD | CHENNAI | 4108.333333 |
| 1262 | HYDERABAD | CHENNAI | 3444.500000 |
| 1265 | CHENNAI | HYDERABAD | 3499.250000 |
| 289 | CHENNAI | KOCHI | 3257.750000 |
| 3004 | BENGALURU | CHENNAI | 3319.666667 |
| 3013 | CHENNAI | BENGALURU | 3257.750000 |
| 3148 | CHENNAI | BENGALURU | 2959.000000 |
| 3241 | CHENNAI | KOCHI | 3303.666667 |
| 3244 | KOCHI | CHENNAI | 3371.500000 |
| 3307 | BENGALURU | CHENNAI | 3309.000000 |

| | | | |
|-----|---------|-----------|-------------|
| 916 | CHENNAI | HYDERABAD | 3699.500000 |
|-----|---------|-----------|-------------|

8. Write a query to display the customers who have booked tickets from Chennai to Hyderabad. The query should display profile_id, customer_name (combine first_name & last_name with comma in b/w), address of the customer.

Give an alias to the name as customer_name.

Hint: Query should fetch unique customers irrespective of multiple tickets booked.

Display the records sorted in ascending order based on profile id.

3 rows

```
select app.profile_id, concat(app.first_name,',',app.last_name) as customer_name,app.address
from air_passenger_profile app join air_ticket_info ati on app.profile_id=ati.profile_id
join air_flight af on ati.flight_id=af.flight_id where af.from_location='chennai'
and af.to_location='hyderabad' group by app.profile_id order by app.profile_id;
```

| ROFILE_ID | CUSTOMER_NAME | ADDRESS |
|-----------|---------------|------------------------------------|
| PFL001 | LATHA,SANKAR | 123 BROAD CROSS ST,CHENNAI-48 |
| PFL004 | AARTHI,RAMESH | 343 6TH STREET,HYDERABAD- 76 |
| PFL005 | SIVA,KUMAR | 125 8TH STREET,CHENNAI-46 |

9. Write a query to display profile id of the passenger(s) who has/have booked maximum number of tickets.

In case of multiple records, display the records sorted in ascending order based on profile id.

2 rows

```
select profile_id from air_ticket_info group by profile_id having
count(ticket_id) >= all (select count(ticket_id)
from air_ticket_info group by profile_id) order by profile_id;
```

| PROFILE_ID |
|------------|
| PFL002 |
| PFL007 |

10. Write a query to display the total number of tickets as "No_of_Tickets" booked in each flight in ABC Airlines. The Query should display the flight_id, from_location, to_location and the number of tickets.

Display only the flights in which atleast 1 ticket is booked.

Display the records sorted in ascending order based on flight id.

7 rows

```
select af.flight_id,af.from_location,af.to_location,count(ati.ticket_id) as
No_of_Tickets
from air_flight af join air_ticket_info ati on af.flight_id=ati.flight_id
group by af.flight_id having count(ati.ticket_id) >= 1;
```

| FLIGHT_ID | FROM_LOCATION | TO_LOCATION | NO_OF_TICKETS |
|-----------|---------------|-------------|---------------|
| 1011 | HYDERABAD | CHENNAI | 4 |
| 1262 | HYDERABAD | CHENNAI | 1 |

| | | | |
|------|-----------|-----------|---|
| 1265 | CHENNAI | HYDERABAD | 2 |
| 3004 | BENGALURU | CHENNAI | 3 |
| 3148 | CHENNAI | BENGALURU | 7 |
| 3244 | KOCHI | CHENNAI | 7 |
| 916 | CHENNAI | HYDERABAD | 2 |

11. Write a query to display the no of services offered by each flight and the total price of the services. The Query should display flight_id, number of services as "No_of_Services" and the cost as "Total_Price" in the same order.

Order the result by Total Price in descending order and then by flight_id in descending order.

Hint: The number of services can be calculated from the number of scheduled departure dates of the flight

11 rows

```
select af.flight_id, count(afd.flight_departure_date) as No_of_Services, sum(afd.price) as
Total_Price from air_flight af join air_flight_details afd on af.flight_id=afd.flight_id
group by flight_id
order by total_price desc, flight_id desc;
```

| FLIGHT_ID | NO_OF_SERVICES | TOTAL_PRICE |
|-----------|----------------|-------------|
| 916 | 4 | 14798.00 |

| | | |
|------|---|----------|
| 1265 | 4 | 13997.00 |
| 3307 | 4 | 13236.00 |
| 3013 | 4 | 13031.00 |
| 289 | 4 | 13031.00 |
| 1011 | 3 | 12325.00 |
| 3004 | 3 | 9959.00 |
| 3241 | 3 | 9911.00 |
| 3148 | 3 | 8877.00 |
| 1262 | 2 | 6889.00 |
| 3244 | 2 | 6743.00 |

12. Write a query to display the number of passengers who have travelled in each flight in each scheduled date. The Query should display flight_id, flight_departure_date and the number of passengers as "No_of_Passengers" in the same order.

Display the records sorted in ascending order based on flight id and then by flight departure date.

9 rows

```
SELECT flight_id,
       flight_departure_date,
```

```

COUNT(ticket_id) AS No_of_Passengers

FROM air_ticket_info

GROUP BY flight_id,

        flight_departure_date

ORDER BY flight_id, flight_departure_date;t

```

| FLIGHT_ID | FLIGHT_DEPARTURE_DATE | NO_OF_PASSENGERS |
|-----------|-----------------------|------------------|
| 1011 | 2013-05-09 | 4 |
| 1262 | 2013-05-20 | 1 |
| 1265 | 2013-04-29 | 1 |
| 1265 | 2013-05-29 | 1 |
| 3004 | 2013-05-02 | 3 |
| 3148 | 2013-05-21 | 2 |
| 3148 | 2013-06-01 | 5 |
| 3244 | 2013-05-03 | 7 |
| 916 | 2013-05-06 | 2 |

13. Write a query to display profile id of passenger(s) who booked minimum number of tickets.

In case of multiple records, display the records sorted in ascending order based on profile id.

1 row

```
select profile_id from air_ticket_info group by profile_id having count(profile_id) <= all  
(select count(profile_id) from air_ticket_info group by profile_id) order by profile_id;
```

| PROFILE_ID |
|------------|
| PFL008 |

14. Write a query to display unique passenger profile id, first name, mobile number and email address of passengers who booked ticket to travel from HYDERABAD to CHENNAI.

Display the records sorted in ascending order based on profile id.

4 rows

```
select distinct ati.profile_id, app.first_name, app.mobile_number, app.email_id  
from air_ticket_info  
ati join air_passenger_profile app on ati.profile_id=app.profile_id join air_flight af  
on ati.flight_id=af.flight_id  
where af.from_location='hyderabad' and af.to_location='chennai' order by profile_id;
```

| PROFILE_ID | FIRST_NAME | MOBILE_NUMBER | EMAIL_ID |
|------------|------------|---------------|------------------|
| PFL001 | LATHA | 9876543210 | LATHA@GMAIL.COM |
| PFL004 | AARTHI | 9595652530 | AARTHI@GMAIL.COM |
| PFL005 | SIVA | 9884416986 | SIVA@GMAIL.COM |

| | | | |
|--------|--------|------------|------------------|
| PFL008 | GANESH | 9375237890 | GANESH@GMAIL.COM |
|--------|--------|------------|------------------|

15. Write a query to intimate the passengers who are boarding Chennai to Hyderabad Flight on 6th May 2013 stating the delay of 1hr in the departure time. The Query should display the passenger's profile_id, first_name, last_name, flight_id, flight_departure_date, actual departure time, actual arrival time, delayed departure time as "Delayed_Departure_Time", delayed arrival time as "Delayed_Arrival_Time". Hint: Distinct Profile ID should be displayed irrespective of multiple tickets booked by the same profile.

Display the records sorted in ascending order based on passenger's profile id.

1 row

```
select distinct app.profile_id, app.first_name, app.last_name, ati.flight_id, ati.flight_departure_date,
af.departure_time, af.arrival_time, af.departure_time , ADDTIME(af.departure_time, '1:00:00') as
Delayed_Departure_Time,
ADDTIME(af.arrival_time, '1:00:00') as Delayed_Arrival_Time from air_passenger_profile app
join air_ticket_info ati on app.profile_id=ati.profile_id join air_flight af on
ati.flight_id=af.flight_id where ati.flight_departure_date='2013-05-06' order by app.profile_id;
```

| PROFILE_ ID | FIRST _NAME | LAST_NAM E | FLIGHT _ID | FLIGHT_ DEPARTURE _DATE | DEPARTURE_TIME | ARRIVAL _TIME |
|-------------|-------------|------------|------------|-------------------------|----------------|---------------|
| PFL005 | SIVA | KUMAR | 916 | 2013-05-06 | 19:55:00 | 21:00:00 |

| | |
|------------------------|----------------------|
| DELAYED_DEPARTURE_TIME | DELAYED_ARRIVAL_TIME |
|------------------------|----------------------|

| | |
|----------|----------|
| 20:55:00 | 22:00:00 |
|----------|----------|

16. Write a query to display the number of tickets as “No_of_Tickets” booked by Kochi Customers. The Query should display the Profile_Id, First_Name, Base_Location and number of tickets booked.

Hint: Use String functions to get the base location of customer from their Address and give alias name as “Base_Location”

Display the records sorted in ascending order based on customer first name.

2 rows

```
select
ap.profile_id,ap.first_name,substring_index(substring_index(ap.address,',',-1),
'- ',1)
as base_location,count(at.ticket_id) as No_of_Tickets from
air_passenger_profile ap join air_ticket_info at
on at.profile_id=ap.profile_id
where substring_index(substring_index(ap.address,',',-1),'- ',1) ='kochi'
group by ap.profile_id order by first_name
```

| PROFILE_ID | FIRST_NAME | BASE_LOCATION | NO_OF_TICKETS |
|------------|------------|---------------|---------------|
| PFL003 | AMIT | KOCHI | 3 |
| PFL006 | RAMESH | KOCHI | 4 |

17. Write a query to display the flight_id, from_location, to_location, number of Services as “No_of_Services” offered in the month of May.

Hint: The number of services can be calculated from the number of scheduled departure dates of the flight

Display the records sorted in ascending order based on flight id.

11 rows

```
select af.flight_id,af.from_location,af.to_location,count(afd.flight_departure_date)
as No_of_Services from air_flight af join air_flight_details afd
on af.flight_id=afd.flight_id where month(afd.flight_departure_date)='05'
group by flight_id order by flight_id;
```

| FLIGHT_ID | FROM_LOCATION | TO_LOCATION | NO_OF_SERVICES |
|-----------|---------------|-------------|----------------|
| 1011 | HYDERABAD | CHENNAI | 2 |
| 1262 | HYDERABAD | CHENNAI | 2 |
| 1265 | CHENNAI | HYDERABAD | 3 |
| 289 | CHENNAI | KOCHI | 4 |
| 3004 | BENGALURU | CHENNAI | 3 |
| 3013 | CHENNAI | BENGALURU | 4 |
| 3148 | CHENNAI | BENGALURU | 2 |
| 3241 | CHENNAI | KOCHI | 3 |
| 3244 | KOCHI | CHENNAI | 2 |
| 3307 | BENGALURU | CHENNAI | 4 |

| | | | |
|-----|---------|-----------|---|
| 916 | CHENNAI | HYDERABAD | 3 |
|-----|---------|-----------|---|

18. Write a query to display profile id, last name, mobile number and email id of passengers whose base location is chennai.

Display the records sorted in ascending order based on profile id.

2 rows

```
select profile_id, last_name, mobile_number, email_id from air_passenger_profile where
substring_index(substring_index(address, ',', -1), '-', 1) = 'chennai'
order by profile_id;
```

| PROFILE_ID | LAST_NAME | MOBILE_NUMBER | EMAIL_ID |
|------------|-----------|---------------|-----------------|
| PFL001 | SANKAR | 9876543210 | LATHA@GMAIL.COM |
| PFL005 | KUMAR | 9884416986 | SIVA@GMAIL.COM |

18. Write a query to display number of flights between 6.00 AM and 6.00 PM from chennai. Hint Use FLIGHT_COUNT as alias name.

1 row

```
select count(flight_id) as FLIGHT_COUNT from air_flight where departure_time between
'6:00:00' and '18:00:00' and from_location = 'chennai';
```

| |
|--------------|
| FLIGHT_COUNT |
| 3 |

19. Write a query to display unique profile id, first name, email id and contact number of passenger(s) who travelled on flight with id 3148. Display the records sorted in ascending order based on first name.

2 rows

```
select distinct app.profile_id, app.first_name, app.email_id, app.mobile_number from
air_passenger_profile app
```

```
join air_ticket_info ati on app.profile_id=ati.profile_id
```

```
where ati.flight_id= 3148 group by app.first_name order by app.first_name;
```

| PROFILE_ID | FIRST_NAME | EMAIL_ID | MOBILE_NUMBER |
|------------|------------|--------------------|---------------|
| PFL002 | ARUN | ARUN@AOL.COM | 8094564243 |
| PFL007 | GAYATHRI | GAYATHRI@GMAIL.COM | 8073245678 |

20. Write a query to display the flights available in Morning, Afternoon, Evening & Night. The Query should display the Flight_Id, From_Location, To_Location, Departure_Time, time of service as "Time_of_Service".

Time of Service should be calculated as: From 05:00:01 Hrs to 12:00:00 Hrs - Morning, 12:00:01 to 18:00:00 Hrs - Afternoon, 18:00:01 to 24:00:00 - Evening and 00:00:01 to 05:00:00 - Night

Display the records sorted in ascending order based on flight id.

11 rows

```

select flight_id,from_location,to_location,departure_time,
case when departure_time between '05:00:01' and '12:00:00' then 'Morning'
when departure_time between '12:00:01' and '18:00:00' then 'Afternoon'
when departure_time between '18:00:01' and '24:00:00' then 'Evening'
when departure_time between '00:00:01' and '05:00:00' then 'Night'
end as Time_of_Service
from air_flight order by flight_id;

```

| FLIGHT_ID | FROM_LOCATION | TO_LOCATION | DEPARTURE_TIME | TIME_OF_SERVICE |
|-----------|---------------|-------------|----------------|-----------------|
| 1011 | HYDERABAD | CHENNAI | 12:30:00 | AFTERNOON |
| 1262 | HYDERABAD | CHENNAI | 06:00:00 | MORNING |
| 1265 | CHENNAI | HYDERABAD | 21:25:00 | EVENING |
| 289 | CHENNAI | KOCHI | 08:40:00 | MORNING |
| 3004 | BENGALURU | CHENNAI | 09:05:00 | MORNING |
| 3013 | CHENNAI | BENGALURU | 07:40:00 | MORNING |
| 3148 | CHENNAI | BENGALURU | 20:15:00 | EVENING |
| 3241 | CHENNAI | KOCHI | 10:40:00 | MORNING |
| 3244 | KOCHI | CHENNAI | 21:10:00 | EVENING |
| 3307 | BENGALURU | CHENNAI | 18:45:00 | EVENING |

| | | | | |
|-----|---------|-----------|----------|---------|
| 916 | CHENNAI | HYDERABAD | 19:55:00 | EVENING |
|-----|---------|-----------|----------|---------|

21.Please follow instructions given below.

Write a query to display flight id,departure date,flight type of all flights. Flight type can be identified based on the following rules : if ticket price is less than 3000 then 'AIR PASSENGER',ticket price between 3000 and less than 4000 'AIR BUS' and ticket price between 4000 and greater than 4000 then 'EXECUTIVE PASSENGER'. Hint use FLIGHT_TYPE as alias name.

Display the records sorted in ascendeing order based on flight_id and then by departure date.

36 rows

```
select flight_id,flight_departure_date,
case when price<3000 then 'AIR PASSENGER'
when price>=3000 and price<=4000 then 'AIR BUS'
when price>4000 then 'EXECUTIVE PASSENGER'
end as FLIGHT_TYPE from air_flight_details order by flight_id,flight_departure_date;
```

| FLIGHT_ID | FLIGHT_DEPARTURE_DATE | FLIGHT_TYPE |
|-----------|-----------------------|---------------------|
| 1011 | 2013-04-30 | EXECUTIVE PASSENGER |
| 1011 | 2013-05-09 | EXECUTIVE PASSENGER |
| 1011 | 2013-05-21 | AIR BUS |
| 1262 | 2013-05-20 | AIR BUS |
| 1262 | 2013-05-29 | AIR BUS |

| | | |
|------|------------|------------------------|
| 1265 | 2013-04-29 | EXECUTIVE PASSENGER |
| 1265 | 2013-05-14 | AIR BUS |
| 1265 | 2013-05-18 | EXECUTIVE PASSENGER |
| 1265 | 2013-05-29 | AIR PASSENGER |
| 289 | 2013-05-06 | AIR BUS |
| 289 | 2013-05-08 | AIR BUS |
| 289 | 2013-05-20 | AIR BUS |
| 289 | 2013-05-31 | AIR PASSENGER |
| 3004 | 2013-05-02 | AIR BUS |
| 3004 | 2013-05-19 | AIR BUS |
| 3004 | 2013-05-24 | AIR BUS |
| 3013 | 2013-05-04 | AIR BUS |
| 3013 | 2013-05-06 | AIR BUS |
| 3013 | 2013-05-22 | AIR BUS |

| | | |
|------|------------|------------------------|
| 3013 | 2013-05-30 | AIR PASSENGER |
| 3148 | 2013-05-16 | AIR BUS |
| 3148 | 2013-05-21 | AIR BUS |
| 3148 | 2013-06-01 | AIR PASSENGER |
| 3241 | 2013-05-01 | EXECUTIVE PASSENGER |
| 3241 | 2013-05-13 | AIR BUS |
| 3241 | 2013-05-27 | AIR PASSENGER |
| 3244 | 2013-05-03 | AIR BUS |
| 3244 | 2013-05-15 | AIR BUS |
| 3307 | 2013-05-03 | AIR BUS |
| 3307 | 2013-05-03 | AIR BUS |
| 3307 | 2013-05-23 | AIR BUS |
| 3307 | 2013-05-29 | AIR BUS |
| 916 | 2013-04-28 | EXECUTIVE |

| | | |
|-----|------------|------------------------|
| | | PASSENGER |
| 916 | 2013-05-01 | EXECUTIVE PASSENGER |
| 916 | 2013-05-06 | AIR BUS |
| 916 | 2013-05-12 | AIR BUS |

22.Please follow instructions given below.

Write a query to display the credit card type and no of credit cards used on the same type. Display the records sorted in ascending order based on credit card type.

Hint: Use CARD_COUNT AS Alias name for no of cards.

3 rows

```
SELECT CARD_TYPE,count(card_type) CARD_COUNT FROM air_credit_card_details group by CARD_TYPE
order by CARD_TYPE;
```

| CARD_TYPE | CARD_COUNT |
|-----------|------------|
| GOLD | 3 |
| INSTANT | 2 |
| PLATINIUM | 3 |

23.Please follow instructions given below.

Write a Query to display serial no, first name, mobile number, email id of all the passengers who holds email address from gmail.com.

The Serial No will be the last three digits of profile ID.

Hint: Use SERIAL_NO as Alias name for serial number.

Display the records sorted in ascending order based on name.

6 rows

```
select substring(profile_id,4) as SERIAL_NO,first_name,mobile_number,email_id
from air_passenger_profile where email_id like '%gmail.com' order by first_name;
```

| SERIAL_NO | FIRST_NAME | MOBILE_NUMBER | EMAIL_ID |
|-----------|------------|---------------|--------------------|
| 004 | AARTHI | 9595652530 | AARTHI@GMAIL.COM |
| 008 | GANESH | 9375237890 | GANESH@GMAIL.COM |
| 007 | GAYATHRI | 8073245678 | GAYATHRI@GMAIL.COM |
| 001 | LATHA | 9876543210 | LATHA@GMAIL.COM |
| 006 | RAMESH | 9432198760 | RAMESH@GMAIL.COM |
| 005 | SIVA | 9884416986 | SIVA@GMAIL.COM |

24. Please follow instructions given below.

Write a query to display the flight(s) which has least number of services in the month of May. The Query should fetch flight_id, from_location, to_location, least number of Services as "No_of_Services" Hint: Number of services offered can be calculated from the number of scheduled departure dates of a flight

If there are multiple flights, display them sorted in ascending order based on flight id.

4 rows

```
select af.flight_id,af.from_location,af.to_location,count(afd.flight_departure_date) as  
No_of_Services from air_flight af join air_flight_details afd on  
af.flight_id=afd.flight_id where month(afd.flight_departure_date)='05' group by af.flight_id  
having count(afd.flight_departure_date)  
<= all (select count(afd.flight_departure_date) from air_flight af join air_flight_details afd on  
af.flight_id=afd.flight_id where month(afd.flight_departure_date)='05' group by af.flight_id)  
order by af.flight_id;
```

| LIGHT_I D | FROM_LOCATION | TO_LOCATION | NO_OF_SERVICES |
|--------------|---------------|-------------|----------------|
| 1011 | HYDERABAD | CHENNAI | 2 |
| 1262 | HYDERABAD | CHENNAI | 2 |
| 3148 | CHENNAI | BENGALURU | 2 |
| 3244 | KOCHI | CHENNAI | 2 |

25.Please follow instructions given below.

Write a query to display the number of flights flying from each location. The Query should display the from location and the number of flights to other locations as “No_of_Flights”.

Hint: Get the distinct from location and to location.

Display the records sorted in ascending order based on from location.

4 rows

```
select distinct from_location,count(to_location) as No_of_Flights from
```

air_flight

group by from_location order by from_location;

| FROM_LOCATION | NO_OF_FLIGHTS |
|---------------|---------------|
| BENGALURU | 2 |
| CHENNAI | 6 |
| HYDERABAD | 2 |
| KOCHI | 1 |

26.Please follow instructions given below.

Write a query to display the number of passengers traveled in each flight in each scheduled date. The Query should display flight_id,from_location,To_location, flight_departure_date and the number of passengers as "No_of_Passengers".

Hint: The Number of passengers inclusive of all the tickets booked with single profile id.

Display the records sorted in ascending order based on flight id and then by flight departure date.

9 rows

```
select af.flight_id,af.from_location,af.to_location,ati.flight_departure_date,count(ati.ticket_id)
```

```
as No_of_Passengers from air_flight af join air_ticket_info ati on af.flight_id=ati.flight_id
```

```
group by af.flight_id,ati.flight_departure_date order by af.flight_id,ati.flight_departure_date;
```

| flight_id | from_location | to_location | flight_departure_date | No_of_Passengers |
|-----------|---------------|-------------|-----------------------|------------------|
| 1011 | HYDERABAD | CHENNAI | 2013-05-09 | 3 |
| 1262 | HYDERABAD | CHENNAI | 2013-05-20 | 1 |
| 1265 | CHENNAI | HYDERABAD | 2013-04-29 | 1 |
| 1265 | CHENNAI | HYDERABAD | 2013-05-29 | 1 |
| 3004 | BENGALURU | CHENNAI | 2013-05-02 | 3 |
| 3148 | CHENNAI | BENGALURU | 2013-05-21 | 1 |
| 3148 | CHENNAI | BENGALURU | 2013-06-01 | 3 |
| 3244 | KOCHI | CHENNAI | 2013-05-03 | 7 |
| 916 | CHENNAI | HYDERABAD | 2013-05-06 | 2 |

27.Please follow instructions given below.

Write a query to display the flight details in which more than 10% of seats have been booked. The query should display Flight_Id, From_Location, To_Location,Total_Seats, seats booked as "No_of_Seats_Booked" .

Display the records sorted in ascending order based on flight id and then by No_of_Seats_Booked.

1 row

```
select af.flight_id,af.from_location,af.to_location,af.total_seats,(af.total_seats-afd.available_seats)
```

```
as No_of_Seats_Booked from air_flight af join air_flight_details afd on af.flight_id=
```

```
afd.flight_id where (af.total_seats-afd.available_seats)>(af.total_seats*0.1) group by flight_id order by
```

```
flight_id,No_of_Seats_Booked;
```

| FLIGHT_ID | FROM_LOCATION | TO_LOCATION | TOTAL_SEATS | NO_OF_SEATS_BOOKED |
|-----------|---------------|-------------|-------------|--------------------|
| 3244 | KOCHI | CHENNAI | 50 | 7 |

28.Please follow instructions given below.

Write a query to display the Flight_Id, Flight_Departure_Date, From_Location,To_Location and Duration

of all flights which has duration of travel less than 1 Hour, 10 Minutes.

Display the records sorted in ascending order based on flight id and then by flight departure date.

14 rows

```
select af.flight_id,afd.flight_departure_date,af.from_location,af.to_location,af.duration
from air_flight af join air_flight_details afd on af.flight_id=afd.flight_id
where duration<'1:10:00' group by af.flight_id,afd.flight_departure_date
order by af.flight_id,afd.flight_departure_date;
```

| FLIGHT_ID | FLIGHT_DEPARTURE_DATE | FROM_LOCATION | TO_LOCATION | DURATION |
|-----------|-----------------------|---------------|-------------|----------|
| 3013 | 2013-05-04 | CHENNAI | BENGALURU | 01:05:00 |
| 3013 | 2013-05-06 | CHENNAI | BENGALURU | 01:05:00 |
| 3013 | 2013-05-22 | CHENNAI | BENGALURU | 01:05:00 |
| 3013 | 2013-05-30 | CHENNAI | BENGALURU | 01:05:00 |
| 3148 | 2013-05-16 | CHENNAI | BENGALURU | 01:05:00 |
| 3148 | 2013-05-21 | CHENNAI | BENGALURU | 01:05:00 |
| 3148 | 2013-06-01 | CHENNAI | BENGALURU | 01:05:00 |
| 3307 | 2013-05-03 | BENGALURU | CHENNAI | 01:00:00 |

| | | | | |
|------|------------|-----------|-----------|----------|
| 3307 | 2013-05-23 | BENGALURU | CHENNAI | 01:00:00 |
| 3307 | 2013-05-29 | BENGALURU | CHENNAI | 01:00:00 |
| 916 | 2013-04-28 | CHENNAI | HYDERABAD | 01:05:00 |
| 916 | 2013-05-01 | CHENNAI | HYDERABAD | 01:05:00 |
| 916 | 2013-05-06 | CHENNAI | HYDERABAD | 01:05:00 |
| 916 | 2013-05-12 | CHENNAI | HYDERABAD | 01:05:00 |

29. Please follow instructions given below.

Write a query to display the flight_id, from_location, to_location, number of services as "No_of_Services", average ticket price as "Average_Price" whose average ticket price is greater than the total average ticket cost of all flights. Order the result by lowest average price.

4 rows

```
select af.flight_id, af.from_location, af.to_location, count(afd.flight_departure_date) as
No_of_Services,
avg(afd.price) as Average_Price from air_flight af join air_flight_details afd
on af.flight_id=afd.flight_id group by af.flight_id having avg(afd.price)>
(select avg(afd.price) from air_flight_details afd) order by afd.price;
```

| FLIGHT_ID | FROM_LOCATION | TO_LOCATION | NO_OF_SERVICES | AVERAGE |
|-----------|---------------|-------------|----------------|-----------|
| 1262 | HYDERABAD | CHENNAI | 2 | 3444.5000 |
| 1265 | CHENNAI | HYDERABAD | 4 | 3499.2500 |

| | | | | |
|------|-----------|-----------|---|-----------|
| 916 | CHENNAI | HYDERABAD | 4 | 3699.5000 |
| 1011 | HYDERABAD | CHENNAI | 3 | 4108.3333 |