## Queries

1. The list of all airlines for a given airport.

 $select\ AIRPORT\_NAME,\ AIRLINE\_NAME,\ FLIGHT\_TYPE\ from\ AIRPORT\_AIRLINE\ natural\ join\ AIRLINE$ 

natural join CITY

where AIRPORT NAME = 'Los Angeles International Airport';

5	Los Angeles International Airport	Gamma_Airlines	International
4	Los Angeles International Airport	Hollywood_Airlines	Local
3	Los Angeles International Airport	United Airlines	Local
2	Los Angeles International Airport	JetBlue Airways	Local
1	Los Angeles International Airport	Southwest Airlines	Domestic
#	AIRPORT_NAME	AIRLINE_NAME	FLIGHT_TYPE

# 2. The list of all flights for a given airline. Sorted by:

## a. starting location

10	Gamma_Airlines	Los Angeles International Airport	Tokyo Haneda Airport	International Flyers	2020-05-01	10:31:00	14:31:00
9	Gamma_Airlines	Los Angeles International Airport	Tokyo Haneda Airport	International Flyers	2020-05-06	15:00:00	22:00:00
8	Gamma_Airlines	Dubai International Airport	Tokyo Haneda Airport	Tango	2020-05-06	15:10:00	23:00:00
7	Gamma_Airlines	O'Hare International Airport	Los Angeles International Airport	The Southerners	2020-04-26	07:35:00	11:31:00
6	Gamma_Airlines	Hartsfield-Jackson Atlanta International Airp	Los Angeles International Airport	The Southerners	2020-04-27	04:45:00	09:00:00
5	Gamma_Airlines	San Diego International Airport	Los Angeles International Airport	Hollywood_flyers	2020-05-01	13:00:00	14:00:00
4	Gamma_Airlines	Shanghai Pudong International Airport	Los Angeles International Airport	International Flyers	1996-08-23	15:00:00	22:00:00
3	Gamma_Airlines	Tokyo Haneda Airport	Los Angeles International Airport	International Flyers	2020-05-04	11:31:00	15:00:00
2	Gamma_Airlines	Tokyo Haneda Airport	Los Angeles International Airport	International Flyers	2020-05-06	10:00:00	14:00:00
1	Gamma_Airlines	San Diego International Airport	Los Angeles International Airport	United_flyers	2020-04-26	13:31:00	15:00:00
ŧ	AIRLINE_NAME	ARRIVAL_AIRPORT	DEPARTURE_AIRPORT	FLIGHT_CREW_NAME	FLIGHT_DATE	FLIGHT_DEPARTURE_TIME	FINAL_ARRIVAL_TIME

# b. destination

select AIRLINE\_NAME, ARRIVAL\_AIRPORT, DEPARTURE\_AIRPORT, FLIGHT\_CREW\_NAME, FLIGHT\_DATE, FLIGHT\_DEPARTURE\_TIME, FINAL\_ARRIVAL\_TIME from FLIGHT inner join FLIGHT SCHEDULE

on FLIGHT.FSID = FLIGHT SCHEDULE.FSID

inner join AIRPORT AIRLINE

on DEPARTURE\_AIRPORT = AIRPORT\_AIRLINE.AIRPORT\_NAME

inner join AIRLINE on

AIRPORT\_AIRLINE.AID = AIRLINE.AID

where AIRLINE NAME = 'Gamma Airlines'

order by ARRIVAL AIRPORT;

	AIRLINE_NAME	ARRIVAL_AIRPORT	DEPARTURE_AIRPORT	FLIGHT_CREW_NAME	FLIGHT_DATE	FLIGHT_DEPARTURE_TIME	FINAL_ARRIVAL_TIME
1	Gamma_Airlines	Dubai International Airport	Tokyo Haneda Airport	Tango	2020-05-06	15:10:00	23:00:00
2	Gamma_Airlines	Hartsfield-Jackson Atlanta International Airp	Los Angeles International Airport	The Southerners	2020-04-27	04:45:00	09:00:00
3	Gamma_Airlines	Los Angeles International Airport	Tokyo Haneda Airport	International Flyers	2020-05-06	15:00:00	22:00:00
4	Gamma_Airlines	Los Angeles International Airport	Tokyo Haneda Airport	International Flyers	2020-05-01	10:31:00	14:31:00
5	Gamma_Airlines	O'Hare International Airport	Los Angeles International Airport	The Southerners	2020-04-26	07:35:00	11:31:00
6	Gamma_Airlines	San Diego International Airport	Los Angeles International Airport	United_flyers	2020-04-26	13:31:00	15:00:00
7	Gamma_Airlines	San Diego International Airport	Los Angeles International Airport	Hollywood_flyers	2020-05-01	13:00:00	14:00:00
8	Gamma_Airlines	Shanghai Pudong International Airport	Los Angeles International Airport	International Flyers	1996-08-23	15:00:00	22:00:00
9	Gamma_Airlines	Tokyo Haneda Airport	Los Angeles International Airport	International Flyers	2020-05-06	10:00:00	14:00:00
10	Gamma_Airlines	Tokyo Haneda Airport	Los Angeles International Airport	International Flyers	2020-05-04	11:31:00	15:00:00

c. longest flight

select AIRLINE\_NAME, ARRIVAL\_AIRPORT, DEPARTURE\_AIRPORT, FLIGHT\_CREW\_NAME, FLIGHT\_DATE, FLIGHT\_DEPARTURE\_TIME, FINAL\_ARRIVAL\_TIME, {fin TIMESTAMPDIFF(SQL\_TSI\_MINUTE, FLIGHT.FLIGHT\_DEPARTURE\_TIME, Flight.FINAL\_ARRIVAL\_TIME)} as time\_difference\_in\_minutes from FLIGHT inner join FLIGHT\_SCHEDULE on FLIGHT.FSID = FLIGHT\_SCHEDULE.FSID inner join AIRPORT\_AIRLINE on DEPARTURE\_AIRPORT = AIRPORT\_AIRLINE.AIRPORT\_NAME inner join AIRLINE on AIRLINE on AIRLINE.AID = AIRLINE.AID where AIRLINE.AID = AIRLINE.AID where AIRLINE\_NAME = 'Gamma\_Airlines' order by {fin TIMESTAMPDIFF(SQL\_TSI\_MINUTE, FLIGHT.FLIGHT\_DEPARTURE\_TIME, Flight.FINAL\_ARRIVAL\_TIME)} desc;

	Max. rows: 100	Fetched Rows: 10						Matching Rows:
	AIRLINE_NAME	ARRIVAL_AIRPORT	DEPARTURE_AIRPORT	FLIGHT_CREW_NAME	FLIGHT_DATE	FLIGHT_DEPARTURE_TIME	FINAL_ARRIVAL_TIME	TIME_DIFFERENCE_IN_MINUTES
1	Gamma_Airlines	Dubai International Airport	Tokyo Haneda Airport	Tango	2020-05-06	15:10:00	23:00:00	4
2	Gamma_Airlines	Los Angeles International Airport	Tokyo Haneda Airport	International Flyers	2020-05-06	15:00:00	22:00:00	4
3	Gamma_Airlines	Shanghai Pudong International Airport	Los Angeles International Airport	International Flyers	1996-08-23	15:00:00	22:00:00	4
4	Gamma_Airlines	Hartsfield-Jackson Atlanta International Airp	Los Angeles International Airport	The Southerners	2020-04-27	04:45:00	09:00:00	2
5	Gamma_Airlines	Los Angeles International Airport	Tokyo Haneda Airport	International Flyers	2020-05-01	10:31:00	14:31:00	2
6	Gamma_Airlines	Tokyo Haneda Airport	Los Angeles International Airport	International Flyers	2020-05-06	10:00:00	14:00:00	2
7	Gamma_Airlines	O'Hare International Airport	Los Angeles International Airport	The Southerners	2020-04-26	07:35:00	11:31:00	2
8	Gamma_Airlines	Tokyo Haneda Airport	Los Angeles International Airport	International Flyers	2020-05-04	11:31:00	15:00:00	2
9	Gamma_Airlines	San Diego International Airport	Los Angeles International Airport	United_flyers	2020-04-26	13:31:00	15:00:00	
10	Gamma_Arlnes	San Diego International Airport	Los Angeles International Airport	Hollywood_flyers	2020-05-01	13:00:00	14:00:00	

#### d. shortest flight.

select AIRLINE\_NAME, ARRIVAL\_AIRPORT, DEPARTURE\_AIRPORT, FLIGHT\_CREW\_NAME,
FLIGHT\_DATE, FLIGHT\_DEPARTURE\_TIME, FINAL\_ARRIVAL\_TIME, {fn
TIMESTAMPDIFF(SQL\_TSI\_MINUTE, FLIGHT.FLIGHT\_DEPARTURE\_TIME,
Flight.FINAL\_ARRIVAL\_TIME)} as time\_difference\_in\_minutes
from FLIGHT inner join FLIGHT\_SCHEDULE
on FLIGHT.FSID = FLIGHT\_SCHEDULE.FSID
inner join AIRPORT\_AIRLINE
on DEPARTURE\_AIRPORT = AIRPORT\_AIRLINE.AIRPORT\_NAME
inner join AIRLINE on
AIRPORT\_AIRLINE.AID = AIRLINE.AID
where AIRLINE\_NAME = 'Gamma\_Airlines'
order by {fn TIMESTAMPDIFF(SQL\_TSI\_MINUTE,
FLIGHT.FLIGHT\_DEPARTURE\_TIME, Flight.FINAL\_ARRIVAL\_TIME)};

#	AIRLINE_NAME	ARRIVAL_AIRPORT	DEPARTURE_AIRPORT	FLIGHT_CREW_NAME	FLIGHT_DATE	FLIGHT_DEPARTURE_TIME	FINAL_ARRIVAL_TIME	TIME_DIFFERENCE_IN_MINUTES
1	Gamma_Airlines	San Diego International Airport	Los Angeles International Airport	Hollywood_flyers	2020-05-01	13:00:00	14:00:00	60
2	Gamma_Airlines	San Diego International Airport	Los Angeles International Airport	United_flyers	2020-04-26	13:31:00	15:00:00	89
3	Gamma_Airlines	Tokyo Haneda Airport	Los Angeles International Airport	International Flyers	2020-05-04	11:31:00	15:00:00	209
4	Gamma_Airlines	O'Hare International Airport	Los Angeles International Airport	The Southerners	2020-04-26	07:35:00	11:31:00	236
5	Gamma_Airlines	Los Angeles International Airport	Tokyo Haneda Airport	International Flyers	2020-05-01	10:31:00	14:31:00	240
6	Gamma_Airlines	Tokyo Haneda Airport	Los Angeles International Airport	International Flyers	2020-05-06	10:00:00	14:00:00	240
7	Gamma_Airlines	Hartsfield-Jackson Atlanta International Airp	Los Angeles International Airport	The Southerners	2020-04-27	04:45:00	09:00:00	255
8	Gamma_Airlines	Los Angeles International Airport	Tokyo Haneda Airport	International Flyers	2020-05-06	15:00:00	22:00:00	420
9	Gamma_Airlines	Shanghai Pudong International Airport	Los Angeles International Airport	International Flyers	1996-08-23	15:00:00	22:00:00	420
10	Gamma Airlines	Dubai International Airport	Tokyo Haneda Airport	Tango	2020-05-06	15:10:00	23:00:00	470

3. Flights that charge for extras (water, etc.)

select FLIGHT\_DEPARTURE\_TIME, FINAL\_ARRIVAL\_TIME, FLIGHT\_CREW\_NAME, FLIGHT\_DATE, ARRIVAL\_AIRPORT, DEPARTURE\_AIRPORT, CHARGE\_TYPE, CHARGE\_AMOUNT from FLIGHT inner join FLIGHT\_SCHEDULE on FLIGHT\_SCHEDULE.FSID inner join CHARGED\_FLIGHT on FLIGHT\_SCHEDULE.FSID = CHARGED\_FLIGHT.FSID inner join CHARGE on CHARGED FLIGHT.FSID = CHARGE.FSID;

ŧ	FLIGHT_DEPARTURE_TIME	FINAL_ARRIVAL_TIME	FLIGHT_CREW_NAME	FLIGHT_DATE	ARRIVAL_AIRPORT	DEPARTURE_AIRPORT	CHARGE_TYPE	CHARGE_AMOUNT
1	07:35:00	11:31:00	The Southerners	2020-04-26	O'Hare International Airport	Los Angeles International Airport	Pillows	10.00
2	04:45:00	09:00:00	The Southerners	2020-04-27	Hartsfield-Jackson Atlanta International Airp	Los Angeles International Airport	Blankets	3.00
3	13:00:00	14:00:00	Hollywood_flyers	2020-05-01	San Diego International Airport	Los Angeles International Airport	Water	2.50
4	13:00:00	14:00:00	Hollywood_flyers	2020-05-01	San Diego International Airport	Los Angeles International Airport	Blankets	3.50
5	13:00:00	14:00:00	Hollywood_flyers	2020-05-01	San Diego International Airport	Los Angeles International Airport	Pillows	5.50
6	13:31:00	15:00:00	United_flyers	2020-04-26	San Diego International Airport	Los Angeles International Airport	Water	4.25
7	16:32:00	18:00:00	United_flyers	2020-04-26	Los Angeles International Airport	San Diego International Airport	Blankets	5.00

4. The crew roster for each flight for each airline

select FLIGHT.FSID, all\_crew.\*, DEPARTURE\_AIRPORT, ARRIVAL\_AIRPORT, FINAL\_ARRIVAL\_TIME, FLIGHT\_DEPARTURE\_TIME from FLIGHT\_SCHEDULE inner join

**FLIGHT** 

on FLIGHT SCHEDULE.FSID = FLIGHT.FSID

inner join

(

 $select\ FLIGHT\_CREW.FLIGHT\_CREW\_NAME,\ FIRST\_NAME,\ LAST\_NAME,\ EMAIL,$ 

AIRLINE NAME, 'Pilot' as occupation

from FLIGHT CREW inner join PILOT on

FLIGHT CREW.FLIGHT CREW NAME = PILOT.FLIGHT CREW NAME

inner join CREW MEMBER on

PILOT.CMID = CREW MEMBER.CMID

inner join AIRLINE on

CREW MEMBER.AID = AIRLINE.AID

union

select FLIGHT CREW.FLIGHT CREW NAME, FIRST NAME, LAST NAME, EMAIL,

AIRLINE NAME,'Co pilot' as occupation

from FLIGHT CREW inner join CO PILOT on

FLIGHT CREW.FLIGHT CREW NAME = CO PILOT.FLIGHT CREW NAME

inner join CREW MEMBER on

CO PILOT.CMID = CREW MEMBER.CMID

inner join AIRLINE on

CREW MEMBER.AID = AIRLINE.AID

union

select FLIGHT\_CREW.FLIGHT\_CREW\_NAME, FIRST\_NAME, LAST\_NAME, EMAIL,

AIRLINE\_NAME, 'Navigator' as occupation

from FLIGHT CREW inner join NAVIGATOR on

FLIGHT\_CREW.FLIGHT\_CREW\_NAME = NAVIGATOR.FLIGHT\_CREW\_NAME

inner join CREW MEMBER on

NAVIGATOR.CMID = CREW\_MEMBER.CMID

inner join AIRLINE on

CREW MEMBER.AID = AIRLINE.AID

union

select FLIGHT CREW.FLIGHT CREW NAME, FIRST NAME, LAST NAME, EMAIL,

AIRLINE NAME, 'flight attendant' as occupation

from FLIGHT CREW inner join FLIGHT ATTENDANT on

FLIGHT ATTENDANT.FLIGHT CREW NAME =

FLIGHT CREW.FLIGHT CREW NAME

inner join CREW MEMBER on

FLIGHT ATTENDANT.CMID = CREW MEMBER.CMID

inner join AIRLINE on

CREW MEMBER.AID = AIRLINE.AID

) as all crew

on all\_crew.flight\_crew\_name = FLIGHT.FLIGHT\_CREW\_NAME order by FSID, occupation;

1	1001 The Southerners	Julie	Anderson	julie@south.com	Southwest Airlines	Co_pilot
2	1001 The Southerners	Ian	McFellow	ian@south.com	Southwest Airlines	Navigator
3	1001 The Southerners	Andrew	Perez	andy@south.com	Southwest Airlines	Pilot
4	1001 The Southerners	Kendrick	Williams	kwil@south.com	Southwest Airlines	flight_attendant
5	1001 The Southerners	Cole	Hart	chart@south.com	Southwest Airlines	flight_attendant
6	1002 The Southerners	Julie	Anderson	julie@south.com	Southwest Airlines	Co_pilot
7	1002 The Southerners	Ian	McFellow	ian@south.com	Southwest Airlines	Navigator
8	1002 The Southerners	Andrew	Perez	andy@south.com	Southwest Airlines	Pilot
9	1002 The Southerners	Kendrick	Williams	kwil@south.com	Southwest Airlines	flight_attendant
10	1002 The Southerners	Cole	Hart	chart@south.com	Southwest Airlines	flight_attendant

#### 5. The trips that are available if you do make one stop over

select first\_trip.fsid as first\_flight\_taken, first\_trip.flight\_date as first\_flight\_date,

first trip.departure airport as starting location, first trip.arrival airport as intermediate location,

first trip.flight departure time as first flight departure time,

first\_trip.FINAL\_ARRIVAL\_TIME as first\_flight\_arrival\_time,

next trip.fsid as available flight, next trip.arrival airport as end location,

next\_trip.flight\_date as second\_trip\_flight\_date, next\_trip.flight\_departure\_time as second\_trip\_departure\_time,

next trip.final arrival time as second trip arriving time from

(SELECT FLIGHT SCHEDULE.FSID,

AIRLINE.AIRLINE NAME, FLIGHT SCHEDULE.ARRIVAL AIRPORT,

FLIGHT SCHEDULE.DEPARTURE AIRPORT, FLIGHT.FLIGHT DATE,

flight.FINAL ARRIVAL TIME, FLIGHT.FLIGHT DEPARTURE TIME

from FLIGHT\_SCHEDULE natural join Flight natural join PILOT natural join CREW\_MEMBER natural join AIRLINE) as first trip

inner join (select FLIGHT\_SCHEDULE.fsid, AIRLINE.airline\_name,

FLIGHT SCHEDULE.arrival airport,

flight\_schedule.departure\_airport, flight.flight\_date, flight.final\_arrival\_time, flight.flight\_departure\_time from FLIGHT\_SCHEDULE natural join flight natural join pilot natural join crew\_member natural join airline) as next\_trip

on first trip.arrival airport = next trip.departure airport

where next trip.flight date >= first trip.flight date

and first trip.final arrival time < next trip.flight departure time

order by first trip.departure airport;



## 6. Management reports of mifly information:

a. arriving flights per city

select CITY\_NAME, count(\*) as arrival\_flights from FLIGHT\_SCHEDULE inner join AIRPORT on

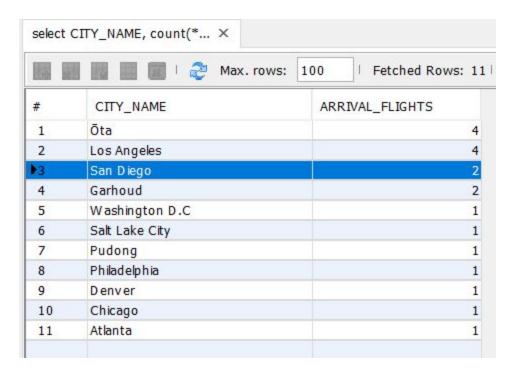
FLIGHT\_SCHEDULE.ARRIVAL\_AIRPORT = AIRPORT.AIRPORT\_NAME

inner join CITY on

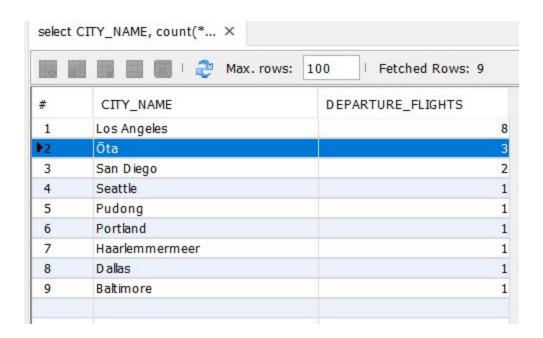
CITY.CID = AIRPORT.CID

group by CITY NAME

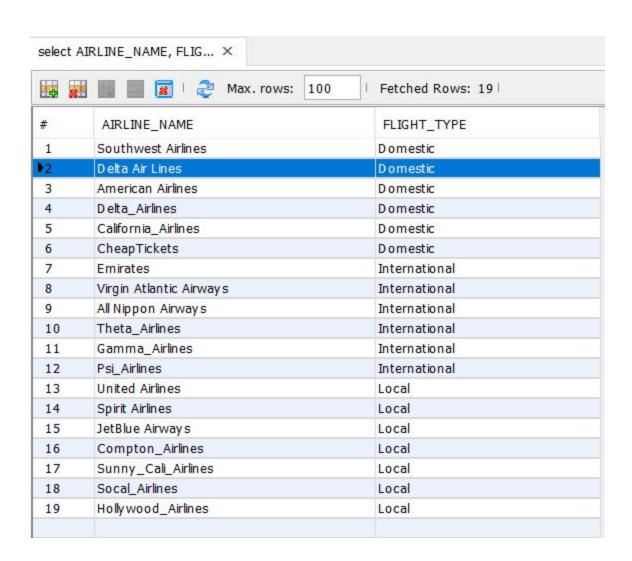
order by arrival\_flights desc;



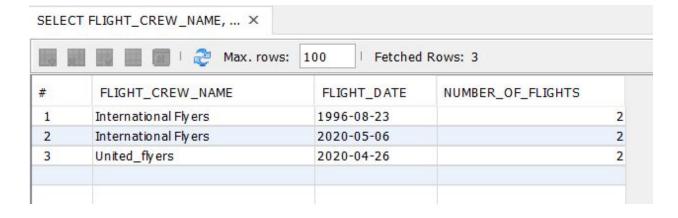
b. departing flights per city
 select CITY\_NAME, count(\*) as departure\_flights from FLIGHT\_SCHEDULE
 inner join AIRPORT on
 FLIGHT\_SCHEDULE.DEPARTURE\_AIRPORT = AIRPORT.AIRPORT\_NAME
 inner join CITY on
 CITY.CID = AIRPORT.CID
 group by CITY\_NAME
 order by departure\_flights desc;



c. list of airlines in each service category select AIRLINE\_NAME, FLIGHT\_TYPE from AIRLINE order by FLIGHT\_TYPE



d. crews that fly multiple flights in a single day
 SELECT FLIGHT\_CREW\_NAME, FLIGHT\_DATE, count(FLIGHT\_DATE) as
 number\_of\_flights
 from FLIGHT
 group by FLIGHT\_CREW\_NAME, FLIGHT\_DATE
 having count(FLIGHT\_DATE) > 1;



7. A list of all incident reports by flight select FLIGHT.FSID,FLIGHT\_DATE, INCIDENT\_TYPE, SEVERITY\_AMOUNT, ARRIVAL\_AIRPORT, DEPARTURE\_AIRPORT from FLIGHT inner join INCIDENT\_REPORT on FLIGHT.FSID = INCIDENT\_REPORT.FSID inner join FLIGHT\_SCHEDULE on FLIGHT\_SCHEDULE.FSID order by FLIGHT.FSID;

0 1		Max. rows: 10	Fetched Rows: 6			
#	FSID	FLIGHT_DATE	INCIDENT_TYPE	SEVERITY_AMOUNT	ARRIVAL_AIRPORT	DEPARTURE_AIRPORT
1	10007	2020-05-06	Praise		5 Dubai International Airport	Tokyo Haneda Airport
▶2	10007	2020-05-06	Injury	1	2 Dubai International Airport	Tokyo Haneda Airport
3	100001	1996-08-23	Praise		5 Los Angeles International Airport	Shanghai Pudong International Airport
4	100002	1996-08-23	Praise		3 Shanghai Pudong International Airport	Los Angeles International Airport
5	100005	2020-05-06	Injury		1 Tokyo Haneda Airport	Los Angeles International Airport
6	100006	2020-05-06	Praise		2 Los Angeles International Airport	Tokyo Haneda Airport

8. Flights that are scheduled to depart in three days

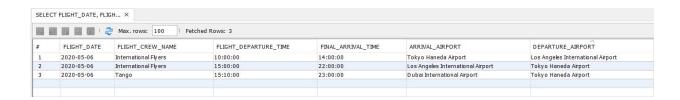
SELECT FLIGHT\_DATE, FLIGHT\_CREW\_NAME, FLIGHT\_DEPARTURE\_TIME, FINAL\_ARRIVAL\_TIME, ARRIVAL\_AIRPORT, DEPARTURE\_AIRPORT

from FLIGHT

inner join FLIGHT SCHEDULE

on FLIGHT.FSID = FLIGHT SCHEDULE.FSID

WHERE {fn TIMESTAMPDIFF(SQL\_TSI\_DAY, CURRENT\_DATE, FLIGHT.FLIGHT DATE)} = 3;



9. All flights that arrived in the busiest airport in the last week

SELECT FLIGHT.FLIGHT\_DEPARTURE\_TIME, FLIGHT.FINAL\_ARRIVAL\_TIME, FLIGHT.FLIGHT CREW NAME,

FLIGHT\_FLIGHT\_DATE, FLIGHT\_SCHEDULE.DEPARTURE\_AIRPORT, FLIGHT\_SCHEDULE.ARRIVAL\_AIRPORT

from FLIGHT natural join FLIGHT SCHEDULE

where ARRIVAL AIRPORT = (

select arrivals.arrival\_airport from (select ARRIVAL\_AIRPORT, count(\*) as number of arrivals from FLIGHT SCHEDULE

group by ARRIVAL AIRPORT) as arrivals

inner join (select DEPARTURE\_AIRPORT, count(\*) as number\_of\_departures from FLIGHT\_SCHEDULE

group by DEPARTURE AIRPORT) as departures on

arrivals.arrival airport = departure airport

where number of arrivals + number of departures >= all(

select arrivals.number of arrivals + number of departures as total

from (select ARRIVAL\_AIRPORT, count(\*) as number\_of\_arrivals from FLIGHT SCHEDULE

group by ARRIVAL AIRPORT) as arrivals

inner join (select DEPARTURE\_AIRPORT, count(\*) as number\_of\_departures from FLIGHT\_SCHEDULE

group by DEPARTURE AIRPORT) as departures on

arrivals.arrival airport = departure airport))

AND TIMESTAMP(FLIGHT\_FLIGHT\_DATE, CURRENT\_TIME) BETWEEN {fn TIMESTAMPADD(SQL\_TSI\_DAY, -12, CURRENT\_DATE)} AND {fn TIMESTAMPADD(SQL\_TSI\_DAY, -6, CURRENT\_DATE)};

			📗 🞆 📗 🖟 Max. rows: 100 📗 Fetched Rows: 1										
¢	FLIGHT_DEPARTURE_TIME	FINAL_ARRIVAL_TIME	FLIGHT_CREW_NAME	FLIGHT_DATE	DEPARTURE_AIRPORT	ARRIVAL_AIRPORT							
1	16:32:00	18:00:00	United_fly ers	2020-04-26	San Diego International Airport	Los Angeles International Airport							

10. Flights that departed more than 30 minutes late.

select FLIGHT\_DATE, FLIGHT\_CREW\_NAME, FLIGHT.FLIGHT\_DEPARTURE\_TIME, FLIGHT.FINAL ARRIVAL TIME,

 $FLIGHT\_SCHEDULE.ARRIVAL\_TIME, FLIGHT\_SCHEDULE.DEPARTURE\_TIME, ARRIVAL\_AIRPORT, DEPARTURE\_AIRPORT$ 

from FLIGHT

inner join FLIGHT SCHEDULE

on FLIGHT.FSID = FLIGHT\_SCHEDULE.FSID

where {fn TIMESTAMPDIFF(SQL\_TSI\_MINUTE, FLIGHT\_SCHEDULE.DEPARTURE\_TIME, FLIGHT.FLIGHT\_DEPARTURE\_TIME)} > 30;



11. Individually designed queries (two per team member) a.List all planes that are now retired ie >= 30 years of life

SELECT \* FROM AIRPLANE where -{fn TIMESTAMPDIFF(SQL TSI YEAR,

CURRENT DATE, AIRPLANE.DATE MANUFACTURED)} > 30;

#	MANUFACTURER	MODEL_NUMBER	PASSENGER_MAXIMUM	TAIL_NUMBER	PLANE_NAME	DATE_MANUFACTURED	AID
1	Textron Aviation	304		80 NBC	Unit	1971-01-01	8
2	AMC MRO	420		42 420	Mary Jane	1975-04-20	4
3	Boeing	600	. 5	00 100	Blue jet	1944-08-23	200
4	Raytheon	744	6	00 200	The Beast	1932-07-23	1000

b. How many retired pilots per airline

select AIRLINE\_NAME, STATE\_NAME, CITY\_NAME, count(\*) as number\_of\_pilots

from PILOT

inner join CREW\_MEMBER on

PILOT.CMID = CREW\_MEMBER.CMID

inner join AIRLINE

on CREW\_MEMBER.AID = AIRLINE.AID

inner join CITY on

AIRLINE.CID = CITY.CID

where -{fn TIMESTAMPDIFF(SQL\_TSI\_YEAR, CURRENT\_TIME,

CREW\_MEMBER.DOB)} > 65

group by AIRLINE\_NAME, STATE\_NAME, CITY\_NAME

# having count(\*) >= 1;

#	AIRLINE_NAME	STATE_NAME	CITY_NAME	NUMBER_OF_PILOTS
1	Socal_Airlines	California	Los Angeles	2
2	Theta_Airlines	California	Los Angeles	1

c.Crew and the airlines that they work for

select FIRST\_NAME, LAST\_NAME, EMAIL, AIRLINE\_NAME, CITY\_NAME,

STATE\_NAME

from CREW\_MEMBER inner join AIRLINE

on CREW\_MEMBER.AID = AIRLINE.AID

inner join CITY on

CITY.CID = AIRLINE.CID

order by AIRLINE\_NAME;

#	FIRST_NAME	LAST_NAME	EMAIL	AIRLINE_NAME	CITY_NAME	STATE_NAME
1	Joshua	Hayter	jhayt@gamma.com	Gamma_Airlines	Los Angeles	California
2	Jamal	Ashraf	ashraf@gamma.com	Gamma_Airlines	Los Angeles	California
3	Paul	Wilkinson	pjwilk@gamma.com	Gamma_Airlines	Los Angeles	California
4	Eduardo	Rocha	Erocha@gamma.com	Gamma_Airlines	Los Angeles	California
5	Sergio	Vasquez	svasq@gamma.com	Gamma_Airlines	Los Angeles	California
5	Mary	Jane	mjay@gamma.com	Gamma_Airlines	Los Angeles	California
7	Peter	Parker	ppark@gamma.com	Gamma_Airlines	Los Angeles	California
3	Pablo	Picasso	ppac@gamma.com	Gamma_Airlines	Los Angeles	California
)	Hector	Rodriguez	Hec@gamma.com	Gamma_Airlines	Los Angeles	California
10	Manny	Cortez	manc@gamma.com	Gamma_Airlines	Los Angeles	California
11	Tim	Roughgarden	tim@stanford.com	Hollywood_Airlines	Los Angeles	California
12	Andrew	Ng	andrew@cmu.com	Hollywood_Airlines	Los Angeles	California
13	Jennifer	Aniston	aniston@aniston.com	Hollywood_Airlines	Los Angeles	California
14	Brad	Pitt	pitt@pitt.com	Holly wood_Airlines	Los Angeles	California
15	Angelina	Jolie	jolie@jolie.com	Hollywood_Airlines	Los Angeles	California
6	Kevin	Bacon	bacon@bacon.com	Hollywood_Airlines	Los Angeles	California
17	Pascal	Vasquez	pvasq@socal.com	Socal_Airlines	Los Angeles	California
.8	Ryan	Hiroko	ry an @ so cal.com	Socal_Airlines	Los Angeles	California
9	Cole	Hart	chart@south.com	Southwest Airlines	D allas	Texas
0	Kendrick	Williams	kwill@south.com	Southwest Airlines	D allas	Texas
21	Ian	McFellow	ian@south.com	Southwest Airlines	D allas	Texas
22	Julie	Anderson	julie@south.com	Southwest Airlines	D allas	Texas
23	Andrew	Perez	andy@south.com	Southwest Airlines	D allas	Texas
24	Jeremey	Howard	jhow@gamma.com	Theta_Airlines	Los Angeles	California
25	Jeff	Edmond	jed@united.com	United Airlines	Chicago	Ilinois
26	Jeff	Erickson	jerick@united.com	United Airlines	Chicago	Ilinois
27	Rachel	Zax	rachzax@united.com	United Airlines	Chicago	Ilinois
28	Erik	D ermain e	erik@united.com	United Airlines	Chicago	Ilinois
29	Eric	Leighman	eric@united.com	United Airlines	Chicago	Ilinois

d.Do a query to find all retired pilots

SELECT FIRST\_NAME, LAST\_NAME, DOB, 'retired pilot' as occupation

from CREW\_MEMBER inner join PILOT

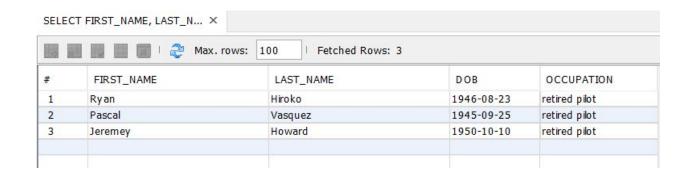
on CREW\_MEMBER.CMID = PILOT.CMID

left outer join FLIGHT\_CREW on

PILOT.FLIGHT\_CREW\_NAME = FLIGHT\_CREW.FLIGHT\_CREW\_NAME

where PILOT.FLIGHT\_CREW\_NAME is null

 $and - \{fn\ TIMESTAMPDIFF(SQL\_TSI\_YEAR,\ CURRENT\_TIME,\ CREW\_MEMBER.DOB)\}$ 



e.Do a query to see the count of airlines a city has to show that no city headquarters more than 10

airlines

select distinct FIRST NAME, LAST NAME, EMAIL, HOUROFEXPERIENCE from

CREW MEMBER

inner join PILOT on

CREW\_MEMBER.CMID = PILOT.CMID

inner join FLIGHT CREW on

PILOT.FLIGHT\_CREW\_NAME = FLIGHT\_CREW.FLIGHT\_CREW\_NAME

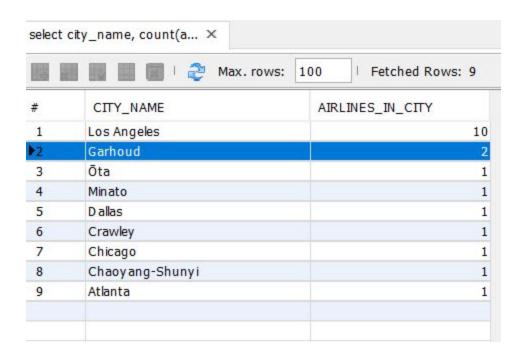
inner join FLIGHT on

FLIGHT\_CREW.FLIGHT\_CREW\_NAME = FLIGHT.FLIGHT\_CREW\_NAME

# inner join FLIGHT\_SCHEDULE on FLIGHT.FSID = FLIGHT\_SCHEDULE.FSID

inner join INTERNATIONAL\_FLIGHT on

INTERNATIONAL\_FLIGHT.FSID = FLIGHT\_SCHEDULE.FSID;



f.List all pilots doing international flights to ensure that they have over 10000 hours of experience

# select distinct FIRST\_NAME, LAST\_NAME, EMAIL, HOUROFEXPERIENCE from CREW\_MEMBER

inner join PILOT on

CREW\_MEMBER.CMID = PILOT.CMID

inner join FLIGHT\_CREW on

PILOT.FLIGHT\_CREW\_NAME = FLIGHT\_CREW.FLIGHT\_CREW\_NAME

inner join FLIGHT on

FLIGHT\_CREW.FLIGHT\_CREW\_NAME = FLIGHT.FLIGHT\_CREW\_NAME

inner join FLIGHT\_SCHEDULE on FLIGHT.FSID = FLIGHT\_SCHEDULE.FSID

inner join INTERNATIONAL\_FLIGHT on

INTERNATIONAL\_FLIGHT.FSID = FLIGHT\_SCHEDULE.FSID;

	Max	. rows: 100   Fetched Rows:	2	
#	FIRST_NAME	LAST_NAME	EMAIL	HOUROFEXPERIENCE
1	Manny	Cortez	manc@gamma.com	15000
2	Sergio	Vasquez	sv asq@gamma.com	200000