Output Queries

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

select distinct abbreviation, airlinename, headquartersCity as "Headquarters City",flightCategory as "Flight Category" from (airline natural join flight) inner join airport on abbreviation = arrivalAirport or abbreviation = departureAirport where abbreviation = 'LAX';

#	ABBREVIATION	AIRLINENAME	Headquarters City	Flight Category
1	LAX		Fort Worth	Domestic
2	LAX	CA West Coast	Los Angeles	Local
3	LAX	United	Chicago	Domestic

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

a. starting location

select airlineName as "Airline Name", flightNumber as "Flight Number", departureTime as "Departure Time", arrivalTime as "Arrival Time", tailNumber as "Tail Number", departureAirport as "Departure Airport", arrivalAirport as "Arrival Airport" from Flight where airlineName = 'American' order by departureAirport;

#	Airline Name	Flight Number Departure Tin	ne Arrival Time	Tail Number	Departure Airport	Arrival Airport
1		4321 08:00:00			DFW	
2						
3			02:20:00		LAS	LAX
4						
5		4928 15:00:00	16:30:00		LAX	
6						
7			02:35:00		LAX	MMH
8						
9		4089 03:00:00	04:35:00		MMH	LAX
10						
11						

b. destination

select airlineName as "Airline Name", flightNumber as "Flight Number", departureTIme as "Departure Time", arrivalTime as "Arrival Time",tailNumber as "Tail Number", departureAirport as "Departure Airport", arrivalAirport as "Arrival Airport" from Flight where airlineName = 'American' order by arrivalAirport;

#	Flight Number Departure Time	Arrival Time	Tail Number	Departure Airport	Arrival Airport
1					DFW
2					
3					LAX
4					
5		02:20:00		LAS	LAX
6					
7	4088 03:00:00	04:35:00		MMH	LAX
8				DFW	
9		02:35:00		LAX	MMH
10					
11	4928 15:00:00	16:30:00	C9	LAX	MYR

c. longest flight

select airlineName as "Airline Name", flightNumber as "Flight Number", departureTime as "Departure Time", arrivalTime as "Arrival Time", tailNumber as "Tail Number", departureAirport as "Departure Airport", arrivalAirport as "Arrival Airport", {fn TIMESTAMPDIFF(SQL_TSI_minute, departuretime, arrivaltime)} as totalMinutes from Flight where airlineName = 'American' order by totalMinutes DESC;

	Flight Number	Departure Time	Arrival Time	Tail Number		Departure Airport		Arrival Airport	TOTALMINUTES
							LAX		300
									299
							DFW		290
									95
			04:35:00		MMH		LAX		95
									95
					LAX				90
									90
			13:30:00				LAX		90
									80
		03:30:00			LAX		LAS		30

d. shortest flight.

select airlineName as "Airline Name", flightNumber as "Flight Number", departureTIme as "Departure Time", arrivalTime as "Arrival Time", tailNumber as "Tail Number", departureAirport as "Departure Airport", arrivalAirport as "Arrival Airport", {fn TIMESTAMPDIFF(SQL_TSI_minute, departuretime, arrivaltime)} as totalMinutes from Flight where airlineName = 'American' order by totalMinutes;

#	Flight Number	Departure Time		Tail Number	Departu	re Airport	Arrival Airport	TOTALMINUTES
1								
2								
3		5:00:00	16:30:00			MY		
4								
5								
6								
7			04:35:00					
8								
9		5:00:00	19:50:50					
10		8:00:00	12:59:59					
11			14:00:00				NX	

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

select airlineName as "Airline Name", flightNumber as "Flight Number", itemName as "Charged Item", cost as "Cost" from ChargedItem where cost != 0

110111	, cost as	Cost Hom Chai	geditein where cos	ι. υ	
#		Airline Name	Flight Number	Charged Item	Cost
1	American		4927 Water		1.5
2	American		4928 Water		1.5
3	American		4929 Water		1.5
4			4167 Water		1.5
5	American		4168 Water		1.5
6			4087 Water		1.5
7	American		4088 Water		1.5
8	American		4089 Water		1.5
9	American		4321 Water		1.5
10	American		4322 Water		1.5
11	American		6785 Water		1.5
12			5211 Pillow		15
13	Alaska		5212 Pillow		15
14	Alaska		5213 Pillow		15
15	Alaska		5195 Pillow		15
16	Alaska		5196 Pillow		15
17	Alaska		5197 Pillow		15
18	Alaska		5555 WiFi		100
19	Alaska		5556 WiFi		100
20	Alaska		5557 WiFi		100
21	Alaska		5961 WiFi		100
22	Alaska		5962 WiFi		100
23	Alaska		5963 WiFi		100
24	Alaska		5411 WiFi		100
25	Alaska		5412 WiFi		100
26			5413 WiFi		100
27	United		1486 Pillow		15
28	United		1122 Pillow		15
29	United		1248 Pillow		15
30	United		1128 Pillow		15
31	United		1992 Pillow		15
32	Delta		1680 Pillow		15
33	Delta		1691 Pillow		15
34	Delta		1751 Pillow		15
35	Delta		1795 Pillow		15
36	Delta		1951 Pillow		15
37	CA West Coas	t	4566 Meal		100
38	CA West Coas		4567 Meal		100
39	Bay Envoy		7885 Meal		100
40	Bay Envoy		7886 Meal		100
41	Emirates		7321 Meal		100
42	Emirates		9898 Meal		100
43	Singapore		1211 Meal		100
44	Singapore		8821 Meal		100
45	American		4928 WIFI		100
46	American		4929 WIFI		100
47	Bay Envoy		7886 WIFI		100
48	CA West Coas		4566 WIFI		100

4. The crew roster for each flight for each airline

select airlinename, flightnumber, crewmember.* from crewMember natural join flightcrew natural join flightinstance natural join flight order by airlinename, flightnumber;

#		AIRLINENAME	FLIGHTNUMBER	FAANUMBER MEMBERNAME	DOB	EVALUATE
	Alaska	/ UI (EII (EI () UNE	5195	446623 Donna Walker	1994-07-18	LVALOATE
	Alaska		5195	856663 Samantha Pillard	1990-04-09	
	Alaska		5195	160158 Scott G Edwards	1980-12-12	
	Alaska		5195	156019 Eric V Shulman	1976-11-11	<u> </u>
	Alaska		5195	264637 Kim Mantle	1978-04-08	Ť
	Alaska		5195	964166 Andrew Keller	1977-07-07	
	Alaska		5195	625091 Erin Hein	1985-11-11	
	Alaska		5196	446623 Donna Walker	1994-07-18	
9	Alaska		5196	856663 Samantha Pillard	1990-04-09	
	Alaska		5196	160158 Scott G Edwards	1980-12-12	
11	Alaska		5196	156019 Eric V Shulman	1976-11-11	_
12	Alaska		5196	264637 Kim Mantle	1978-04-08	Ť
13	Alaska		5196	964166 Andrew Keller	1977-07-07	
14	Alaska		5196	625091 Erin Hein	1985-11-11	
15	Alaska		5197	446623 Donna Walker	1994-07-18	
	Alaska		5197	856663 Samantha Pillard	1990-04-09	
17	Alaska		5197	160158 Scott G Edwards	1980-12-12	
	Alaska		5197	156019 Eric V Shulman	1976-11-11	~
19	Alaska		5197	264637 Kim Mantle	1978-04-08	
	Alaska		5197	964166 Andrew Keller	1977-07-07	
21	Alaska		5197	625091 Erin Hein	1985-11-11	
22	Alaska		5211	994432 Grace Shaye	1968-11-23	
23	Alaska		5211	760655 Tiffany Mabrey	1992-05-19	
24	Alaska		5211	344311 Claire Miller	1996-04-03	
25	Alaska		5211	457664 Emmet Bradley	1976-08-15	
	Alaska		5211	142421 Richard McKeon	1980-11-11	
26	Alaska		5211	702470 Samuel L Jackson	1948-12-21	
27	Alaska		5211	994432 Grace Shaye	1968-11-23	
28 29	Alaska		5212	760655 Tiffany Mabrey	1992-05-19	
	Alaska		5212	344311 Claire Miller	1996-04-03	
30	Alaska		5212		1976-08-15	
31	Alaska		5212	457664 Emmet Bradley 142421 Richard McKeon		
32					1980-11-11	
33	Alaska		5212	702470 Samuel L Jackson	1948-12-21	
34	Alaska		5213	994432 Grace Shaye	1968-11-23	
	Alaska		5213	760655 Tiffany Mabrey	1992-05-19	
36	Alaska		5213 5213	344311 Claire Miller	1996-04-03	
37	Alaska			457664 Emmet Bradley	1976-08-15	
38	Alaska		5213	142421 Richard McKeon	1980-11-11	
39	Alaska		5213	702470 Samuel L Jackson	1948-12-21	
40	Alaska		5411	673349 Beth Summers	1997-05-16	
41	Alaska		5411	565331 Christina Stocker	1989-03-24	
42	Alaska		5411	915091 Sam Oyana	1980-09-01	
43	Alaska		5411	643034 Mick Jager	1983-03-20	
44	Alaska		5411	563633 Kenny Koi	1979-09-05	
45	Alaska		5412	673349 Beth Summers	1997-05-16	
			5412	565331 Christina Stocker	1989-03-24	
47	Alaska		5412	915091 Sam Oyana	1980-09-01	
48			5412	643034 Mick Jager	1983-03-20	
49	Alaska		5412	563633 Kenny Koi	1979-09-05	
			5413	673349 Beth Summers	1997-05-16	
51	Alaska		5413	565331 Christina Stocker	1989-03-24	
			5413	915091 Sam Oyana	1980-09-01	
53	Alaska		5413	643034 Mick Jager	1983-03-20	
			5413	563633 Kenny Koi	1979-09-05	
	Alaska		5555	183328 John Jones	1973-12-13	
				952493 Hal Jordan	1980-07-18	
57	Alaska		5555	184937 Wally West	1986-04-28	
				172450 Bruce Wayne	1976-07-03	
	Alaska		5555	194385 Clark Kent	1978-03-21	
	Alaska		5555	245694 Diana Prince	1983-01-17	

61	Alaska	5556	183328 John Jones	1973-12-13
62	Alaska	5556	952493 Hal Jordan	1980-07-18
63	Alaska	5556	184937 Wally West	1986-04-28
64	Alaska	5556	172450 Bruce Wayne	1976-07-03
65	Alaska	5556	194385 Clark Kent	1978-03-21
66	Alaska	5556	245694 Diana Prince	1983-01-17
67	Alaska	5557	183328 John Jones	1973-12-13
68	Alaska	5557	952493 Hal Jordan	1980-07-18
69	Alaska	5557	184937 Wally West	1986-04-28
70	Alaska	5557	172450 Bruce Wayne	1976-07-03
71	Alaska	5557	194385 Clark Kent	1978-03-21
72	Alaska	5557	245694 Diana Prince	1983-01-17
73	Alaska	5961	845421 Finn Donalds	1992-06-13
74	Alaska	5961	737462 Darcy May	1996-02-12
75	Alaska	5961	851951 Tom Hanks	1956-07-09
76	Alaska	5961	656463 Linda Hill	1981-12-21
77	Alaska	5961	656321 Penelope Griff	1980-06-02
78	Alaska	5962	845421 Finn Donalds	1992-06-13
79	Alaska	5962	737462 Darcy May	1996-02-12
80		5962	851951 Tom Hanks	1956-07-09
81	Alaska	5962	656463 Linda Hill	1981-12-21
82			656321 Penelope Griff	1980-06-02
83	Alaska	5963	845421 Finn Donalds	1992-06-13
84		5963	737462 Darcy May	1996-02-12
85	Alaska	5963	851951 Tom Hanks	1956-07-09
86		5963	656463 Linda Hill	1981-12-21
87	Alaska	5963	656321 Penelope Griff	1980-06-02
88		4087	446623 Donna Walker	1994-07-18
89	American	4087	856663 Samantha Pillard	1990-04-09
90		4087	160158 Scott G Edwards	1980-12-12
91	American	4087	156019 Eric V Shulman	1976-11-11
92	American	4087	264637 Kim Mantle	1978-04-08
93	American	4087	964166 Andrew Keller	1977-07-07
94		4087	625091 Erin Hein	1985-11-11
95	American	4088 4088	446623 Donna Walker	1994-07-18
96	American	4088	856663 Samantha Pillard 160158 Scott G Edwards	1990-04-09 1980-12-12
97 98	American American	4088	156019 Eric V Shulman	1980-12-12
99	American	4088	264637 Kim Mantle	1978-04-08
100	American	4088	964166 Andrew Keller	1977-07-07
101	American	4088	625091 Erin Hein	1985-11-11
102	American	4089	446623 Donna Walker	1994-07-18
103	American	4089	856663 Samantha Pillard	1990-04-09
104	American	4089	160158 Scott G Edwards	1980-12-12
105	American	4089	156019 Eric V Shulman	1976-11-11
106	American	4089	264637 Kim Mantle	1978-04-08
107	American	4089	964166 Andrew Keller	1977-07-07
108			625091 Erin Hein	1985-11-11
109	American	4167	994432 Grace Shaye	1968-11-23
110	American	4167	760655 Tiffany Mabrey	1992-05-19
111	American	4167	344311 Claire Miller	1996-04-03
112	American	4167	457664 Emmet Bradley	1976-08-15
113	American	4167	142421 Richard McKeon	1980-11-11
114		4167	702470 Samuel L Jackson	1948-12-21
115	American	4168	994432 Grace Shaye	1968-11-23
116	American	4168	760655 Tiffany Mabrey	1992-05-19
117	American	4168	344311 Claire Miller	1996-04-03
118	American	4168	457664 Emmet Bradley	1976-08-15
119	American American	4168 4168	142421 Richard McKeon 702470 Samuel L Jackson	1980-11-11 1948-12-21
120	American	4168	702470 Samuel L Jackson	1948-12-21

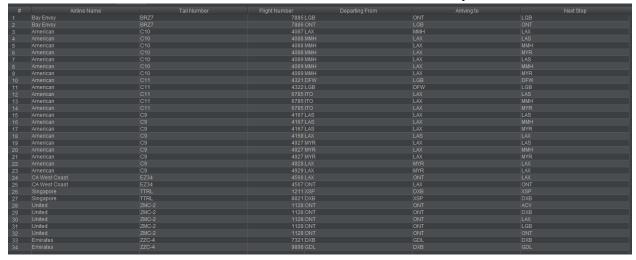
121	American	4321	446623 Donna Walker	1994-07-18	
122	American	4321	856663 Samantha Pillard	1990-04-09	
123	American	4321	160158 Scott G Edwards	1980-12-12	
124	American	4321	156019 Eric V Shulman	1976-11-11	V
125	American	4321	264637 Kim Mantle	1978-04-08	Ť
126	American	4321	964166 Andrew Keller	1977-07-07	-
127	American	4321	625091 Erin Hein	1985-11-11	
128	American	4322	446623 Donna Walker	1994-07-18	-
129	American	4322	856663 Samantha Pillard	1990-04-09	
130	American	4322	160158 Scott G Edwards	1980-12-12	-
131	American	4322	156019 Eric V Shulman	1976-11-11	V
132	American	4322	264637 Kim Mantle	1978-04-08	Ť
133	American	4322	964166 Andrew Keller	1977-07-07	
134	American	4322	625091 Erin Hein	1985-11-11	-
135	American	4927	994432 Grace Shaye	1968-11-23	
136	American	4927	760655 Tiffany Mabrey	1992-05-19	
137	American	4927	344311 Claire Miller	1996-04-03	
138	American	4927	457664 Emmet Bradley	1976-08-15	
139	American	4927	142421 Richard McKeon	1980-11-11	
140	American	4927	702470 Samuel L Jackson	1948-12-21	
141	American	4928	994432 Grace Shaye	1968-11-23	
142	American	4928	760655 Tiffany Mabrey	1992-05-19	i
143	American	4928	344311 Claire Miller	1996-04-03	
144	American	4928	457664 Emmet Bradley	1976-08-15	ī
145	American	4928	142421 Richard McKeon	1980-11-11	
146	American	4928	702470 Samuel L Jackson	1948-12-21	
147	American	4929	994432 Grace Shaye	1968-11-23	
148	American	4929	760655 Tiffany Mabrey	1992-05-19	
149	American	4929	344311 Claire Miller	1996-04-03	
150	American	4929	457664 Emmet Bradley	1976-08-15	
151	American	4929	142421 Richard McKeon	1980-11-11	
152	American	4929	702470 Samuel L Jackson	1948-12-21	
153	American	6785	994432 Grace Shaye	1968-11-23	
154	American	6785	760655 Tiffany Mabrey	1992-05-19	
155	American	6785	344311 Claire Miller	1996-04-03	
156		6785	457664 Emmet Bradley	1976-08-15	
157	American	6785	142421 Richard McKeon	1980-11-11	
158		6785	702470 Samuel L Jackson	1948-12-21	
159	Bay Envoy	7885	845421 Finn Donalds	1992-06-13	
160	Bay Envoy		737462 Darcy May	1996-02-12	
161	Bay Envoy	7885	851951 Tom Hanks	1956-07-09	
162	Bay Envoy	7885	656463 Linda Hill	1981-12-21	
163	Bay Envoy	7885	656321 Penelope Griff	1980-06-02	
164	Bay Envoy		183328 John Jones	1973-12-13	
165	Bay Envoy	7886	952493 Hal Jordan	1980-07-18	
166	Bay Envoy		184937 Wally West	1986-04-28	
167	Bay Envoy	7886	172450 Bruce Wayne	1976-07-03	
168	Bay Envoy		194385 Clark Kent	1978-03-21	
169	Bay Envoy	7886	245694 Diana Prince	1983-01-17	
170	Brussel	1909	845421 Finn Donalds	1992-06-13	
171	Brussel	1909	737462 Darcy May	1996-02-12	-
172	Brussel	1909	851951 Tom Hanks	1956-07-09	-
173	Brussel	1909	656463 Linda Hill	1981-12-21	•
174	Brussel	1909	656321 Penelope Griff	1980-06-02	
175	Brussel	5501 5501	845421 Finn Donalds	1992-06-13 1996-02-12	-
176	Brussel	5501	737462 Darcy May	1996-02-12	
177	Brussel Brussel	5501	851951 Tom Hanks 656463 Linda Hill	1981-12-21	
178 179	Brussel	5501	656321 Penelope Griff	1980-06-02	
		4566	994432 Grace Shaye	1968-11-23	-
180	CA West Coast	4000	33443Z Glace ollaye	1900-11-23	

	1			1 1	_
181	CA West Coast	4566	760655 Tiffany Mabrey	1992-05-19	
182	CA West Coast		344311 Claire Miller	1996-04-03	
183	CA West Coast	4566	457664 Emmet Bradley	1976-08-15	
184	CA West Coast		142421 Richard McKeon	1980-11-11	
185	CA West Coast	4566	702470 Samuel L Jackson	1948-12-21	
186	CA West Coast	4567	446623 Donna Walker	1994-07-18	
187	CA West Coast	4567	856663 Samantha Pillard	1990-04-09	
188	CA West Coast	4567	160158 Scott G Edwards	1980-12-12	
189	CA West Coast	4567	156019 Eric V Shulman	1976-11-11	\checkmark
190	CA West Coast	4567	264637 Kim Mantle	1978-04-08	
191	CA West Coast	4567	964166 Andrew Keller	1977-07-07	
192	CA West Coast	4567	625091 Erin Hein	1985-11-11	
193	Cathay Pacific	1059	994432 Grace Shaye	1968-11-23	
194	Cathay Pacific		760655 Tiffany Mabrey	1992-05-19	
195	Cathay Pacific	1059	344311 Claire Miller	1996-04-03	
196	Cathay Pacific		457664 Emmet Bradley	1976-08-15	
197	Cathay Pacific	1059	142421 Richard McKeon	1980-11-11	
198	Cathay Pacific		702470 Samuel L Jackson	1948-12-21	
199	Cathay Pacific	1596	845421 Finn Donalds	1992-06-13	
200	Cathay Pacific	1596	737462 Darcy May	1996-02-12	
201	Cathay Pacific	1596	851951 Tom Hanks	1956-07-09	
202	Cathay Pacific	1596	656463 Linda Hill	1981-12-21	
203	Cathay Pacific	1596	656321 Penelope Griff	1980-06-02	
204	Delta	1680	673349 Beth Summers	1997-05-16	
205	Delta	1680	565331 Christina Stocker	1989-03-24	
206	Delta	1680	915091 Sam Oyana	1980-09-01	
207	Delta	1680	643034 Mick Jager	1983-03-20	
208	Delta	1680	563633 Kenny Koi	1979-09-05	
209	Delta	1691	994432 Grace Shaye	1968-11-23	
210	Delta	1691	760655 Tiffany Mabrey	1992-05-19	
211	Delta	1691	344311 Claire Miller	1996-04-03	
212	Delta	1691	457664 Emmet Bradley	1976-08-15	
213	Delta	1691	142421 Richard McKeon	1980-11-11	
214	Delta	1691	702470 Samuel L Jackson	1948-12-21	
215	Delta	1751	446623 Donna Walker	1994-07-18	
216	Delta	1751	856663 Samantha Pillard	1990-04-09	
217	Delta	1751	160158 Scott G Edwards	1980-12-12	
218	Delta	1751	156019 Eric V Shulman	1976-11-11	$\overline{\checkmark}$
219	Delta	1751	264637 Kim Mantle	1978-04-08	Ť
220	Delta	1751	964166 Andrew Keller	1977-07-07	
221	Delta	1751	625091 Erin Hein	1985-11-11	
222	Delta	1795	845421 Finn Donalds	1992-06-13	
223	Delta	1795	737462 Darcy May	1996-02-12	
223	Delta	1795	851951 Tom Hanks	1956-07-09	-
225	Delta	1795	656463 Linda Hill	1981-12-21	
225	Delta	1795	656321 Penelope Griff	1980-06-02	
227	Delta	1951	183328 John Jones	1973-12-13	
228	Delta	1951	952493 Hal Jordan	1980-07-18	
228	Delta	1951	184937 Wally West	1986-04-28	
230	Delta	1951	172450 Bruce Wayne	1976-07-03	
230	Delta	1951	194385 Clark Kent	1978-03-21	
231	Delta	1951	245694 Diana Prince	1983-01-17	
232	Emirates	2019	994432 Grace Shaye	1968-11-23	
233	Emirates	2019	760655 Tiffany Mabrey	1992-05-19	
234	Emirates	2019	344311 Claire Miller	1996-04-03	
	Emirates	2019	457664 Emmet Bradley	1976-04-03	
236		2019	142421 Richard McKeon	1980-11-11	
237	Emirates	2019			
238	Emirates	6019	702470 Samuel L Jackson 994432 Grace Shave	1948-12-21 1968-11-23	
239	Emirates				
240			760655 Tiffany Mabrey	1992-05-19	

241	Emirates	6019	344311 Claire Miller	1996-04-03	
242	Emirates	6019	457664 Emmet Bradley	1976-08-15	
243	Emirates	6019	142421 Richard McKeon	1980-11-11	
244		6019	702470 Samuel L Jackson	1948-12-21	
245	Emirates	7321	446623 Donna Walker	1994-07-18	
246 247	Emirates Emirates	7321 7321	856663 Samantha Pillard 160158 Scott G Edwards	1990-04-09 1980-12-12	
248	Emirates	7321	156019 Eric V Shulman	1976-11-11	✓
249	Emirates	7321	264637 Kim Mantle	1978-04-08	
	Emirates	7321	964166 Andrew Keller	1977-07-07	
251	Emirates	7321	625091 Erin Hein	1985-11-11	
252	Emirates	9898 9898	446623 Donna Walker 856663 Samantha Pillard	1994-07-18 1990-04-09	
253 254	Emirates Emirates	9898	160158 Scott G Edwards	1980-12-12	
255	Emirates	9898	156019 Eric V Shulman	1976-11-11	✓
256			264637 Kim Mantle	1978-04-08	
257	Emirates	9898	964166 Andrew Keller	1977-07-07	
258	Emirates	9898	625091 Erin Hein	1985-11-11	
259 260	Japan Japan	2511 2511	446623 Donna Walker 856663 Samantha Pillard	1994-07-18 1990-04-09	
261	Japan	2511	160158 Scott G Edwards	1980-12-12	
262	Japan	2511	156019 Eric V Shulman	1976-11-11	<u></u>
263	Japan	2511	264637 Kim Mantle	1978-04-08	
264		2511	964166 Andrew Keller	1977-07-07	
	Japan Karaan Air	2511	625091 Erin Hein	1985-11-11	
266 267	Korean Air Korean Air	2751 2751	446623 Donna Walker 856663 Samantha Pillard	1994-07-18 1990-04-09	
268	Korean Air	2751	160158 Scott G Edwards	1980-12-12	
269	Korean Air	2751	156019 Eric V Shulman	1976-11-11	V
	Korean Air		264637 Kim Mantle	1978-04-08	
271	Korean Air	2751	964166 Andrew Keller	1977-07-07	
272	Korean Air	2751	625091 Erin Hein	1985-11-11	
273 274	Singapore Singapore	1211 1211	994432 Grace Shaye 760655 Tiffany Mabrey	1968-11-23 1992-05-19	
275	Singapore	1211	344311 Claire Miller	1996-04-03	
276	Singapore	1211	457664 Emmet Bradley	1976-08-15	
277	Singapore	1211	142421 Richard McKeon	1980-11-11	
		1211	702470 Samuel L Jackson	1948-12-21	
279	Singapore	2020	673349 Beth Summers	1997-05-16	
280 281	Singapore Singapore	2020 2020	565331 Christina Stocker 915091 Sam Oyana	1989-03-24 1980-09-01	
282	Singapore	2020	643034 Mick Jager	1983-03-20	
283	Singapore	2020	563633 Kenny Koi	1979-09-05	
284	Singapore	8821	994432 Grace Shaye	1968-11-23	
285	Singapore	8821	760655 Tiffany Mabrey	1992-05-19	
286	Singapore	8821 8821	344311 Claire Miller	1996-04-03	
287 288	Singapore Singapore	8821	457664 Emmet Bradley 142421 Richard McKeon	1976-08-15 1980-11-11	
289	Singapore	8821	702470 Samuel L Jackson	1948-12-21	
290	United	1122	994432 Grace Shaye	1968-11-23	
291	United	1122	760655 Tiffany Mabrey	1992-05-19	
292	United	1122	344311 Claire Miller	1996-04-03	
293	United United	1122 1122	457664 Emmet Bradley 142421 Richard McKeon	1976-08-15 1980-11-11	
294 295	United	1122	702470 Samuel L Jackson	1980-11-11	
296	United	1128	845421 Finn Donalds	1992-06-13	
297	United	1128	737462 Darcy May	1996-02-12	
	United	1128	851951 Tom Hanks	1956-07-09	
299	United	1128	656463 Linda Hill	1981-12-21	
300	United	1128	656321 Penelope Griff	1980-06-02	
	United United	1248 1248	446623 Donna Walker 856663 Samantha Pillard	1994-07-18 1990-04-09	
	United	1248	160158 Scott G Edwards	1980-12-12	
	United	1248	156019 Eric V Shulman	1976-11-11	V
305	United	1248	264637 Kim Mantle	1978-04-08	
		1248	964166 Andrew Keller	1977-07-07	
	United	1248	625091 Erin Hein	1985-11-11	
	United United	1486 1486	673349 Beth Summers 565331 Christina Stocker	1997-05-16 1989-03-24	
	United	1486	915091 Sam Oyana	1980-09-01	
	United	1486	643034 Mick Jager	1983-03-20	
			563633 Kenny Koi	1979-09-05	
	United	1992	183328 John Jones	1973-12-13	
314	United		952493 Hal Jordan	1980-07-18	
		1000	19/1027 Mally West	1006 04 00	
315	United	1992 1992	184937 Wally West 172450 Bruce Wayne	1986-04-28 1976-07-03	
315 316		1992 1992 1992	184937 Wally West 172450 Bruce Wayne 194385 Clark Kent	1986-04-28 1976-07-03 1978-03-21	

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

select distinct a.airlineName as "Airline Name", a.tailNumber as "Tail Number", a.flightNumber as "Flight Number", a.departureAirport as "Departing From", a.arrivalAirport as "Arriving to", b.arrivalAirport as "Next Stop" from Flight a INNER join Flight b ON a.ARRIVALAIRPORT = b.DEPARTUREAIRPORT and a.airlineName = b.airlineName order by a.tailNumber



6. Management reports of mifly information:

a. arriving flights per city

select city, count(arrivalairport) as "Arriving Flights" from airport natural join flight where arrivalairport = abbreviation group by city order by "Arriving Flights" desc;

#	CITY	Arriving Flights
1	Los Angeles	7
2	Ontario	6
3	Las Vegas	5
4	Mammoth Lakes	4
5	Long Beach	4
6	Hilo	4
7	Dubai	4
8	Tokyo	3
9	Guadalajara	3
10	Boulder City	3
11	Seoul	2
12	Monterey	2
13	Manchester	2
14	Arcata	2
15	Seltar	1
16	Dallas	1

b. departing flights per city

select city, count(departureAirport) as "Departing Flights" from airport natural join flight where departureAirport = abbreviation group by city order by "Departing Flights" desc;

#	CITY	Departing Flights
1	Monterey	16
2	Ontario	12
3	Los Angeles	5
4	Seltar	3
5	Las Vegas	3
6	Dubai	3
7	Tokyo	2
8	Seoul	2
9	Mammoth Lakes	2
10	Long Beach	2
11	Hilo	1
12	Guadalajara	
13	Dallas	1

c. list of airlines in each service category

select * from airline order by flightcategory;

50100	moin unimic order of ingine	ategory,	
#	AIRLINENAME	HEADQUARTERSCITY	FLIGHTCATEGORY
1	United	Chicago	Domestic
2	Spirit	Miramar	Domestic
3	South West	Dallas	Domestic
4	JetBlue	Long Island	Domestic
5	Hawaiian	Honolulu	Domestic
6	Delta	Atlanta	Domestic
7	Allegiant	Las Vegas	Domestic
8	Alaska	Seattle	Domestic
9	American	Fort Worth	Domestic
10	Japan	Tokyo	International
11	Korean Air	Seoul	International
12	Cathay Pacific	Hong Kong	International
13	Brussel	Diegem	International
14	Singapore	Singapore	International
15	Emirates	Dubai	International
16	Bay Envoy	Los Angeles	Local
17	CA West Coast	Los Angeles	Local

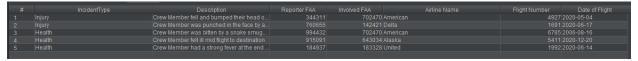
d. crews that fly multiple flights in a single day

select crewname, dates, count(dates) as "Number of Flights" from flightCrew natural join flightInstance group by crewname, dates having count(dates) > 1 order by "Number of Flights" desc;

#	CREWNAME	DATES	Number of Flights
1	Jet 7	2020-12-20	3
2	Snakes	2020-05-07	2
3	Alpha	2020-06-23	2
4	Alpha	2020-05-16	2

7. A list of all incident reports by flight

select incidentType as "IncidentType", description as "Description", reporterFAA as "Reporter FAA", involvedFAA as "Involved FAA", airlineName as "Airline Name", flightNumber as "Flight Number", dates as "Date of Flight" from IncidentReport



8. Flights that are scheduled to depart in three days

select airlineName as "Airline Name", flightNumber as "Flight Number", dates as "Date of Flight", actualDepartureTime as "Actual Departure Time", actualArrivalTime as "Actual Arrival Time", crewName as "Crew Name" from flightInstance where dates = CAST({fn TIMESTAMPADD (SQL TSI DAY, 3, CURRENT TIMESTAMP) } AS DATE);



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

select * from flightInstance natural join flight where arrivalAirport in (select abbreviation from ((airport inner join flight on abbreviation = arrivalAirport or abbreviation = departureAirport) natural join flightInstance) where dates between CAST({fn TIMESTAMPADD(SQL_TSI_DAY,-7,CURRENT_TIMESTAMP)} AS DATE) and CAST({fn TIMESTAMPADD(SQL_TSI_DAY,-1,CURRENT_TIMESTAMP)} AS DATE) group by abbreviation Order by COUNT(Dates) DESC FETCH FIRST ROW ONLY) and dates between CAST({fn TIMESTAMPADD(SQL_TSI_DAY,-7,CURRENT_TIMESTAMP)} AS DATE) and CAST({fn TIMESTAMPADD(SQL_TSI_DAY,-1,CURRENT_TIMESTAMP)} AS DATE);

10. Flights that departed more than 30 minutes late.

select flightNumber as "Flight Number", airlineName as "Airline Name", departureTime as "Departure Time", actualDepartureTime as "Actual Departure Time" from Flight natural join flightInstance where {fn TIMESTAMPDIFF(SQL_TSI_MINUTE, departureTime,actualDepartureTime)} > 30;

#	Flight Number	Airline Name	Departure Time	Actual Departure Time
1	2511	Japan	12:00:00	12:35:00
2	2751	Korean Air	12:00:00	13:35:35
3	1596	Cathay Pacific	12:00:00	14:55:15
4	1909	Brussel	12:00:00	16:30:15
5	4566	CA West Coast	10:00:00	12:45:00
6	4567	CA West Coast	11:00:00	13:35:00
7	7885	Bay Envoy	08:00:00	12:00:00
8	7886	Bay Envoy	09:20:00	12:00:00

11. Individually designed queries (two per team member)

a. Display all flights that were late. The results should show that all late flights with a WIFI charge have been waived.

```
select flightNumber as "Flight Number",
    airlineName as "Airline Name",
    departureTIme as "Departure Time",
    actualDepartureTime as "Actual Departure Time",
    itemName as "ItemName",
    cost as "Cost"

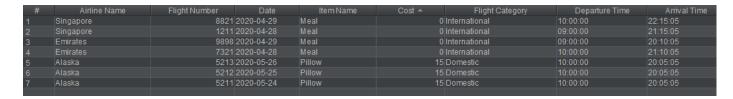
from Flight natural join flightInstance natural join chargedItem
    where {fn TIMESTAMPDIFF(SQL_TSI_MINUTE, departureTime,actualD
    epartureTime)} > 1
    order by itemName;
```

#	Flight Number Ai	irline Name De	parture Time Actua	I Departure Time ItemName	Cost
1	7886 Bay Envoy	09:20:00	12:00:00	Meal	
2	7885 Bay Envoy				
3	4567 CA West Coast	11:00:00	13:35:00	Meal	
4					
5			16:30:15	No Extra Charges	
6	1596 Cathay Pacific				
7		12:00:00	13:35:35	No Extra Charges	
8					
9	7886 Bay Envoy	09:20:00		WIFI	
10					
11				WIFI	
12					
13	4168 American	03:30:00	03:33:00	Water	
14					
15	4929 American			Water	
16					

b.Display all flights that are over 9 hours long. The results should show that all international flights over 9 hours with a meal charge have been waived.

SELECT airlineName as "Airline Name",
flightNumber as "Flight Number",
dates as "Date",
itemName as "Item Name",
cost as "Cost",
flightCategory as "Flight Category",
departureTime as "Departure Time",
arrivalTime as "Arrival Time"

from Flight natural join Airline natural join chargedItem where {fn TIMESTAMPDIFF(SQL_TSI_MINUTE, departureTime,arrivalTime)}>540 Order by itemName;



c. Display all flights that charge extra on meals. Verify that all meals for local flights are waived to 0. For the table, display flight category, airline name, flight number, item name, and cost. Sort by flight category in ascending order.

select flightCategory as "Flight Category", airlineName as "Airline Name", flightNumber as "Flight Number", itemName as "Item Name", cost as "Cost" from Flight natural join Airline natural join chargedItem where itemName = 'Meal' order by flightCategory

#	Flight Category	Airline Name	Flight Number	Item Name	Cost
1		Singapore	8821 Meal		100
2		Singapore			100
3	International		9898 Meal		100
4					100
5	Local	CA West Coast	4567 Meal		0
6					0
7	Local	Bay Envoy	7886 Meal		0
8		Bay Envoy			0

d. Display all flights that are longer than 6 hours. Confirm that flights that are longer than 6 hours and have extra charges on pillows are waived. Include airline name, flight number, departure time, arrival time, tail number, departure airport, arrival airport, item name, and cost.

select airlineName as "Airline Name", flightNumber as "Flight Number", departureTime as "Departure Time", arrivalTime as "Arrival Time", tailNumber as "Tail Number", departureAirport as "Departure Airport", arrivalAirport as "Arrival Airport", itemName as "Item Name", cost as "Cost" from Flight natural join chargedItem where {fn TIMESTAMPDIFF(SQL_TSI_MINUTE, departureTime, arrivalTime)} > 360;



e. Search for crew members marked for evaluation.

select * from crewmember where evaluate = 'true';

#	FAANUMBER	MEMBERNAME	DOB	EVALUATE	CREWNAME
1	702470	Samuel L Jackson	1948-12-21	\checkmark	Snakes
2	156019	Eric V Shulman	1976-11-11	\checkmark	Alpha

f. find planned flights between 10 and 20 hours.

$select~\{fn~TIMESTAMPDIFF(SQL_TSI_hour,~departureTime,~arrivalTime)\}~as$ "Flight Hours", flight.* from flight where {fn~TIMESTAMPDIFF(SQL_TSI_MINUTE,~departureTime,~arrivalTime)}~between 600 and 1200;}

#	Flight Hours	AIRLINENÂME	FLIGHTNUMBER	DEPARTURETIME	ARRIVALTIME	TAILNUMBER	DEPARTUREAIRPORT	ARRIVALAIRPORT
1	10	Alaska	5211	10:00:00	20:05:05	MW248	MYR	ONT
2	10	Alaska	5212	10:00:00	20:05:05	MW249	MYR	ONT
3	10	Alaska	5213	10:00:00	20:05:05	MW250	MYR	ONT
4	11	Emirates	7321	10:00:00	21:10:05	ZZC-4	DXB	GDL
5	11	Emirates	9898	09:00:00	20:10:05	ZZC-4	GDL	DXB
6	12	Singapore	1211	09:00:00	21:15:05	TTRL	XSP	DXB
7	12	Singapore	8821	10:00:00	22:15:05	TTRL	DXB	XSP