

## SQL Query

### Airlines Database

**Q1.** Given company name find out all flight details?

**Company Name:** Indigo

**SQL:** select flight\_no, flight\_name from company natural join flight\_detail where c\_name='Indigo';

**Output:**

	flight_no character(5)	flight_name character varying(30)
1	10101	6E-187
2	10102	6E-134
3	10103	6E-343
4	10104	6E-278
5	10105	6E-236

**Q2.** Given the flight number find out route (source, destination)?

**Flight No:** 10101

**SQL:** select flight\_name, source, destination from (select \* from flight\_detail natural join all\_path where flight\_no='10101') as r1 natural join route;

**Output:**

	flight_name character varying(30)	source character varying(20)	destination character varying(20)
1	6E-187	Delhi	Mumbai
2	6E-187	Delhi	Goa
3	6E-187	Delhi	Jaipur
4	6E-187	Mumbai	Goa
5	6E-187	Mumbai	Jaipur
6	6E-187	Goa	Jaipur

**Q3.** Given a day find out all airports and flight details?

**Day:** Monday

**SQL:** select flight\_no, flight\_name, depart\_time, arrival\_time, source, destination from (select \* from flight\_detail natural join flight\_route) as r1 natural join days where day\_name='Monday') as r2 natural join route;

**Output:**

	flight_no character(5)	flight_name character varying(30)	depart_time time without time zone	arrival_time time without time zone	source character varying(20)	destination character varying(20)
1	10101	6E-187	01:10:00	02:10:00	Delhi	Mumbai
2	10101	6E-187	02:40:00	04:10:00	Mumbai	Goa
3	10101	6E-187	04:10:00	06:20:00	Goa	Jaipur

**Q4** Given a route find out all type of fare?.

**Route:** Ahmedabad to Channai

**SQL:** select flight\_no,fare,passenger\_status\_name from(select \* from fare\_detail natural join route)as r1 natural join passenger\_status where source='Ahmedabad' and destination='Channai';

**Output:**

	flight_no character(5)	fare integer	passenger_status_name character varying(15)	class_name character varying(20)
1	10205	2000	Adult	Genral
2	10205	1600	Child	Genral
3	10205	1400	PWD	Genral
4	10205	12000	Adult	Business
5	10205	11000	Child	Business
6	10205	10000	PWD	Business
7	10201	10000	PWD	Business

**Q5.**Given a source and destination find out flight details?

**Route:** Delhi to Mumbai

**SQL:** select flight\_no,flight\_name,source,destination from (select \* from flight\_detail natural join all\_path)as r1 natural join route where source='Delhi' and destination='Mumbai';

**Output:**

	flight_no character(5)	flight_name character varying(30)	source character varying(20)	destination character varying(20)
1	10101	6E-187	Delhi	Mumbai

**Q6.**Find out Max fare with flight Detail?

**SQL:** select class\_id,flight\_no,passenger\_status\_id,route\_id,fare from fare\_detail where 7

**Output:**

	class_id integer	flight_no character(5)	passenger_status_id character(3)	route_id character(4)	fare integer
1	1	10205	AAA	I008	15000

**Q7.** Given PNR find out all details?

**--PNR No: AAAAA00001**

**SQL:** select

pnr\_no, fname, lname, gender, age, flight\_no, flight\_name, source, destination, ticket\_date, journey\_date, fare from (select \* from ((select \* from ticket natural join passenger where pnr\_no='AAAAA00001') as r1 natural join

(select \* from flight\_detail natural join route) as r2)) as r3 natural join fare\_detail;

**Output:**

	pnr_no character(10)	fname character varying(15)	lname character varying(15)	gender character varying(10)	age integer	flight_no character(5)	flight_name character varying(100)	source character varying(10)	destination character varying(10)	ticket_date date	journey_date date	fare integer
1	AAAAA00001	Arti	Bhadoriya	F	20	10101	6E-187	Delhi	Mumbai	2016-02-23	2016-03-12	2000
2	AAAAA00001	Abhishek	khatra	M	20	10101	6E-187	Delhi	Mumbai	2016-02-23	2016-03-12	2000
3	AAAAA00001	Pankaj	Bhadoriya	M	20	10101	6E-187	Delhi	Mumbai	2016-02-23	2016-03-12	2000
4	AAAAA00001	Vishal	Chandel	M	20	10101	6E-187	Delhi	Mumbai	2016-02-23	2016-03-12	2000

**Q8.** Find out how many ticket book for particular date for Mumbai?

**SQL:** select count(seat\_no) as No\_of\_Ticket from (select \* from passenger natural join ticket) as r1 natural join route where ticket\_date='2016-02-23' and destination='Mumbai';

**Output:**

	no_of_ticket bigint
1	4

**Q9.** Find out how many ticket book for particular date from Delhi to Mumbai?

**SQL:** select count(pnr\_no) from (select \* from passenger natural join ticket where journey\_date='2016-03-12') as r1 natural join route where source='Delhi' and destination='Mumbai';

**Output:**

	count bigint
1	4

**Q10.** Find out how many ticket book for particular date?

SQL:

```
select count(pnr_no)as No_of_Ticket from passenger natural join ticket where
ticket_date='2016-02-23';
```

Output:

	no_of_ticket bigint
1	5

**Q11.** Number of flight a particular company?

```
SQL: c_id,count(select flight_no),c_name from (company natural join
flight_detail) group by c_id;
```

Output:

	c_id character(3)	count bigint	c_name character varying(20)
1	104	5	Go Air
2	110	5	Air One
3	101	5	Indigo
4	106	5	Air India
5	107	5	AirIndiaExpress
6	103	5	VistraAirlines
7	108	5	Air Costa
8	105	5	Spice Jet
9	109	5	AirPegasus
10	102	5	Jet Airways

**Q12.** Find Out User detail those have maximum booking?

```
SQL: select * from users natural join (select user_id,count(pnr_no) from
ticket group by user_id having count(pnr_no) >= all
(select count(pnr_no) from ticket group by user_id)) as r;
```

Output:

	user_id character(9)	fname character varying(15)	lname character varying(15)	gender character varying(10)	dob date	emailid character varying(30)	contact_no character(10)	state character varying(15)	country character varying(15)	count bigint
1	201452052	Kshitiz	Khinchi	M	1996-01-15	kshikhug@gmail.com	9783458957	Rajasthan	India	2
2	201451051	Sneha	Bist	F	1997-05-21	snehab@gmail.com	9742556287	MP	India	2

**Q13.** How many seat book of a particular flight?

SQL: select count(pnr\_no) from passenger natural join ticket where journey\_date='2016-03-12';

Output:

	flight_no character(5)	count bigint
1	10805	2
2	10302	2
3	10404	1
4	10603	1
5	10101	5
6	10205	2

Q14. Update profile

SQL: update users Set  
fname='Sakshi',lname='Dubay',emailid='skdubay998@gmail.com',contact\_no='9865423432',  
where fname='name';

Q15. Find out flight detail who going Monday and from Delhi to Mumbai?

SQL: select  
flight\_no,flight\_name,source,destination,depart\_time,arrival\_time,day\_name from((select \* from flight\_detail natural join flight\_route)as r1  
natural join (select \* from all\_path natural join route)as r2) as r3  
natural join days where day\_name='Monday' and source='Delhi' and destination='Mumbai';

Output:

	flight_no character(5)	flight_name character varying(30)	source character varying(20)	destination character varying(20)	depart_time time without time zone	arrival_time time without time zone	day_name character varying(13)
1	10101	6E-187	Delhi	Mumbai	01:10:00	02:10:00	Monday

Q16. Find out PNR No which have Booked maximum number of sheets?

SQL: select pnr\_no,count(seat\_no) as cc from (select \* from  
flight\_route join ticket on(flight\_route.route\_id=ticket.route\_id and  
flight\_route.flight\_no=ticket.flight\_no )) as r natural join passenger  
group by pnr\_no having count(seat\_no) >= all ( select count(seat\_no)  
from  
(select \* from flight\_route join ticket  
on(flight\_route.route\_id=ticket.route\_id and  
flight\_route.flight\_no=ticket.flight\_no)) as r natural join passenger  
group by pnr\_no);

Output:

	pnr_no character(10)	cc bigint
1	AAAAA00001	4

Q17. Find out the total no ticket of a particular journey date?

**SQL:** select count(pnr\_no) from passenger natural join ticket where journey\_date='2016-03-12';

Output:

	count bigint
1	4

Q18. Find out the route-id which have maximum flight?

**SQL:** select route\_id,count(\*) from flight\_route natural join all\_path group by route\_id having count(\*) >= all (select count(\*) from flight\_route natural join all\_path group by route\_id);

Output:

	route_id character(4)	count bigint
1	A007	1
2	C008	1
3	D006	1
4	C010	1
5	B007	1
6	A001	1
7	G003	1
8	E006	1
9	A006	1
10	B006	1
11	D008	1
12	I002	1
13	I008	1
14	E008	1
15	C001	1