

QUERIES

Query 1: List the Orders placed in a month

```
SELECT o.*,tr.pickup_date FROM orders o
JOIN transportation tr ON tr.fk_order_id=o.order_id
WHERE tr.pickup_date BETWEEN '2021-10-01' AND '2021-10-30';
```

```

1 SELECT o.*,tr.pickup_date FROM orders o
2 JOIN transportation tr ON tr.fk_order_id=o.order_id
3 WHERE tr.pickup_date BETWEEN '2021-10-01' AND '2021-10-30';
4

```

Data Output	Explain	Messages	Notifications																									
<table> <tr> <th>order_id</th> <th>order_name</th> <th>fk_client_gst_no</th> <th>fk_e_id</th> <th>pickup_date</th> </tr> <tr> <td>integer</td> <td>character varying (30)</td> <td>character varying (15)</td> <td>integer</td> <td>date</td> </tr> <tr> <td>1</td> <td>2021100018</td> <td>Paper Transportation</td> <td>07AAAAA0000A0Z0</td> <td>3 2021-10-30</td> </tr> <tr> <td>2</td> <td>2021090010</td> <td>Gas-Based Fuels Transportation</td> <td>29BBBBB1111B1Z1</td> <td>5 2021-10-28</td> </tr> <tr> <td>3</td> <td>2021010016</td> <td>Televisions Transportation</td> <td>27SEXYR6969A1Z4</td> <td>1 2021-10-28</td> </tr> </table>	order_id	order_name	fk_client_gst_no	fk_e_id	pickup_date	integer	character varying (30)	character varying (15)	integer	date	1	2021100018	Paper Transportation	07AAAAA0000A0Z0	3 2021-10-30	2	2021090010	Gas-Based Fuels Transportation	29BBBBB1111B1Z1	5 2021-10-28	3	2021010016	Televisions Transportation	27SEXYR6969A1Z4	1 2021-10-28			
order_id	order_name	fk_client_gst_no	fk_e_id	pickup_date																								
integer	character varying (30)	character varying (15)	integer	date																								
1	2021100018	Paper Transportation	07AAAAA0000A0Z0	3 2021-10-30																								
2	2021090010	Gas-Based Fuels Transportation	29BBBBB1111B1Z1	5 2021-10-28																								
3	2021010016	Televisions Transportation	27SEXYR6969A1Z4	1 2021-10-28																								

Query 2: Get client details where transaction amount is greater than 20000.

```
SELECT DISTINCT ON (cl.client_gst_no)
client_gst_no,cl.client_name,o.order_id,tr.t_id,tr.t_amount FROM client cl
JOIN orders o ON o.fk_client_gst_no=cl.client_gst_no
JOIN transactions tr ON tr.fk_order_id=o.order_id
WHERE tr.t_amount>20000;
```

1 SELECT DISTINCT ON (cl.client_gst_no) client_gst_no,cl.client_name,
2 o.order_id,tr.t_id,tr.t_amount FROM client cl
3 JOIN orders o ON o.fk_client_gst_no=cl.client_gst_no
4 JOIN transactions tr ON tr.fk_order_id=o.order_id
5 WHERE tr.t_amount>20000;
6

Data Output

Explain

Messages

Notifications

	client_gst_no character varying (15)	client_name character varying (30)	order_id integer	t_id integer	t_amount numeric (9,2)	
1	03BBBBB1111B1Z1	Arijit Singh	2021030017	16	35000.09	
2	07AAAAA0000A0Z0	Zakir Khan	2021010001	1	40000.12	
3	08STQVW2345N5V3	Suraj	2021020030	26	60000.00	
4	24ABCDE1234F1Z5	Dhvani	2021030008	11	22000.78	
5	24FGHIJ3456L6O9	Ravi	2021070024	29	40000.00	
6	27JKLMN7890X2Z4	Ishita	2021040023	24	56787.65	
7	29BBBBB1111B1Z1	Jeff Bezos	2021050015	5	53000.41	
8	29GTYKL1234K1D5	Rohit	2021020026	30	25500.50	

Query 3: Get order details of top three transaction amount.

```
SELECT o.*,tr.t_amount FROM transactions tr  
JOIN orders o ON tr.fk_order_id=o.order_id  
ORDER BY t_amount DESC LIMIT 3;
```

```
1 SELECT o.*,tr.t_amount FROM transactions tr  
2 JOIN orders o ON tr.fk_order_id=o.order_id  
3 ORDER BY t_amount DESC LIMIT 3;  
4
```

Data Output Explain Messages Notifications

	order_id integer	order_name character varying (30)	fk_client_gst_no character varying (15)	fk_e_id integer	t_amount numeric (9,2)
1	2021090019	Coal Transportation	24ABCDE1234F1Z5	1	70000.00
2	2021020030	Wool Transportation	08STQVW2345N5V3	2	60000.00
3	2021040023	WoodTransportation	27JKLMN7890X2Z4	2	56787.65

Query 4: List of transporters that have delivered orders to Bangalore.

```
SELECT t.* from transporter t  
JOIN transportation tr ON tr.fk_transporter_id=t.transporter_id  
WHERE destination_location = 'Banglore'  
GROUP BY t.transporter_id;
```

```
1 SELECT t.* from transporter t  
2 JOIN transportation tr ON tr.fk_transporter_id=t.transporter_id  
3 WHERE destination_location = 'Banglore'  
4 GROUP BY t.transporter_id;  
5  
6
```

Data Output Explain Messages Notifications

	transporter_id [PK] integer	transporter_companyname character varying (50)	transporter_type character varying (20)
1	1	Chartered Logistics Ltd	Road
2	3	Coastal Roadways Limited	Road
3	9	Western Carriers India Limited	Air

Query 5: No. of orders completed by each transporter

```
SELECT Distinct on (t.transporter_id) t.transporter_id,  
t.transporter_companyname,COUNT(t.transporter_id) FROM transporter t  
JOIN transportation tr ON tr.fk_transporter_id=t.transporter_id  
JOIN orders o ON o.order_id=tr.fk_order_id  
GROUP BY t.transporter_id;
```

1	SELECT Distinct on (t.transporter_id) t.transporter_id,
2	t.transporter_companyname,COUNT(t.transporter_id) FROM transporter t
3	JOIN transportation tr ON tr.fk_transporter_id=t.transporter_id
4	JOIN orders o ON o.order_id=tr.fk_order_id
5	GROUP BY t.transporter_id;
6	

Data Output	Explain	Messages	Notifications
transporter_id [PK] integer	transporter_companyname character varying (50)	count bigint	
1	1 Chartered Logistics Ltd	3	
2	2 ABC India Limited	3	
3	3 Coastal Roadways Limited	3	
4	4 Coastal Waterways	3	
5	5 The Great Eastern Shipping Co Ltd	1	
6	6 ESSAR SHIPPING LTD	3	
7	7 Alpha Cargo Express Private Limited	2	
8	8 Delhivery	3	
9	9 Western Carriers India Limited	3	

Query 6: Employee of the Year

```
SELECT * FROM (  
SELECT DISTINCT ON (e.e_id) e.e_id ,e.e_name,SUM(tr.t_amount) as total FROM  
transactions tr  
JOIN orders o ON tr.fk_order_id=o.order_id  
JOIN employee e ON e.e_id=o.fk_e_id  
WHERE EXTRACT(YEAR FROM tr.t_date)=2021  
GROUP BY e.e_id) emp  
ORDER BY total DESC LIMIT 1 ;
```

```

1 SELECT * FROM (
2 SELECT DISTINCT ON (e.e_id) e.e_id ,e.e_name,SUM(tr.t_amount) as total FROM transactions tr
3 JOIN orders o ON tr.fk_order_id=o.order_id
4 JOIN employee e ON e.e_id=o.fk_e_id
5 WHERE EXTRACT(YEAR FROM tr.t_date)=2021
6 GROUP BY e.e_id) emp
7 ORDER BY total DESC LIMIT 1 ;
8

```

Data Output Explain Messages Notifications

	e_id [PK] integer	e_name character varying (30)	total numeric	
1	2	Devarsh	263289.48	

Query 7: Search ppl whose payment is pending for more than 20 days and add 10% penalty charges to their amount.

```

SELECT tr.t_id,tr.t_amount,tr.t_date,o.order_id,cl.client_gst_no,cl.client_name,
(CURRENT_DATE::date - tr.t_date::date) AS days,((tr.t_amount*0.10)+tr.t_amount) AS
updated_t_amount
FROM transactions tr
JOIN orders o ON o.order_id=tr.fk_order_id
JOIN client cl ON cl.client_gst_no=o.fk_client_gst_no
WHERE tr.t_status='pending' AND (CURRENT_DATE::date - tr.t_date::date)>20
ORDER BY tr.t_id;

```

```

1 SELECT tr.t_id,tr.t_amount,tr.t_date,o.order_id,cl.client_gst_no,cl.client_name,
2 (CURRENT_DATE::date - tr.t_date::date) AS days,((tr.t_amount*0.10)+tr.t_amount) AS updated_t_amount
3 FROM transactions tr
4 JOIN orders o ON o.order_id=tr.fk_order_id
5 JOIN client cl ON cl.client_gst_no=o.fk_client_gst_no
6 WHERE tr.t_status='pending' AND (CURRENT_DATE::date - tr.t_date::date)>20
7 ORDER BY tr.t_id;
8

```

Data Output Explain Messages Notifications

	t_id integer	t_amount numeric (9,2)	t_date date	order_id integer	client_gst_no character varying (15)	client_name character varying (30)	days integer	updated_t_amount numeric	
1	19	2000.12	2021-11-03	2021120014	24ABCDE1234F1Z5	Dhvani	30	2200.1320	

Query 8: Most valuable client

```
SELECT * FROM (  
  
SELECT DISTINCT ON (cl.client_gst_no) cl.client_gst_no ,cl.client_name,SUM(tr.t_amount) as  
total FROM transactions tr  
  
JOIN orders o ON tr.fk_order_id=o.order_id  
  
JOIN client cl ON cl.client_gst_no = o.fk_client_gst_no  
  
GROUP BY cl.client_gst_no) abc  
  
ORDER BY total DESC LIMIT 1;
```

1	SELECT * FROM (
2	SELECT DISTINCT ON (cl.client_gst_no) cl.client_gst_no ,cl.client_name,
3	SUM(tr.t_amount) as total FROM transactions tr
4	JOIN orders o ON tr.fk_order_id=o.order_id
5	JOIN client cl ON cl.client_gst_no = o.fk_client_gst_no
6	GROUP BY cl.client_gst_no) abc
7	ORDER BY total DESC LIMIT 1;
8	

Data Output	Explain	Messages	Notifications								
<table><thead><tr><th></th><th>client_gst_no [PK] character varying (15)</th><th>client_name character varying (30)</th><th>total numeric</th></tr></thead><tbody><tr><td>1</td><td>07AAAAA0000A0Z0</td><td>Zakir Khan</td><td>172001.86</td></tr></tbody></table>		client_gst_no [PK] character varying (15)	client_name character varying (30)	total numeric	1	07AAAAA0000A0Z0	Zakir Khan	172001.86			
	client_gst_no [PK] character varying (15)	client_name character varying (30)	total numeric								
1	07AAAAA0000A0Z0	Zakir Khan	172001.86								

Query 9:





- Pilots and the orders delivered by them

```
SELECT pilot_id,pilot_name,tran.fk_order_id,o.order_name FROM pilot pi  
  
JOIN airtransport air ON air.plane_id=pi.fk_planeid  
  
JOIN transporter tr ON tr.transporter_id=air.fk_transporterid  
  
JOIN transportation tran ON tran.fk_transporter_id=tr.transporter_id  
  
JOIN orders o ON tran.fk_order_id=o.order_id;
```

```

1 SELECT pilot_id,pilot_name,tran.fk_order_id,o.order_name FROM pilot pi
2 JOIN airtransport air ON air.plane_id=pi.fk_planeid
3 JOIN transporter tr ON tr.transporter_id=air.fk_transporterid
4 JOIN transportation tran ON tran.fk_transporter_id=tr.transporter_id
5 JOIN orders o ON tran.fk_order_id=o.order_id;
6
7

```

	Data Output	Explain	Messages	Notifications
	 pilot_id integer	 pilot_name character varying (30)	 fk_order_id integer	 order_name character varying (30)
1	301	Jack	2021020026	CNG Transportation
2	301	Jack	2021010007	Animal Transportation
3	301	Jack	2021100018	Paper Transportation
4	302	Alex	2021040023	WoodTransportation
5	302	Alex	2021070020	Meat Transportation
6	303	Walt	2021010022	Bike Transportation
7	303	Walt	2021030017	Sugar Transportation
8	303	Walt	2021070012	Wine Transportation

- Drivers and the orders delivered by them

```
SELECT driver_id,driver_name,tran.fk_order_id FROM driver d
```

```
JOIN roadtransport rd ON rd.vehicle_no=d.fk_vehicleno
```





```
JOIN transporter tr ON tr.transporter_id=rd.fk_transporterid
```

```
JOIN transportation tran ON tran.fk_transporter_id=tr.transporter_id;
```

```

1 SELECT driver_id,driver_name,tran.fk_order_id,o.order_name FROM driver d
2 JOIN roadtransport rd ON rd.vehicle_no=d.fk_vehicleno
3 JOIN transporter tr ON tr.transporter_id=rd.fk_transporterid
4 JOIN transportation tran ON tran.fk_transporter_id=tr.transporter_id
5 JOIN orders o ON tran.fk_order_id=o.order_id;
6

```

	Data Output	Explain	Messages	Notifications
	 driver_id integer	 driver_name character varying (30)	 fk_order_id integer	 order_name character varying (30)
1	101	John	2021070024	Crane Transportation
2	101	John	2021090010	Gas-Based Fuels Transportation
3	101	John	2021010001	Car Transportation
4	102	Harry	2021020030	Wool Transportation
5	102	Harry	2021110013	Grain Transportation
6	102	Harry	2021020011	Machinery Transportation
7	103	David	2021050028	Sports Items Transportation
8	103	David	2021050015	Kerosene Transportation
9	103	David	2021020003	Shoes Transportation



- **Captain and the orders delivered by them**

```
SELECT captain_id,captain_name,tran.fk_order_id,o.order_name FROM captain cp
JOIN watertransport w ON w.ship_id=cp.fk_shipid
JOIN transporter tr ON tr.transporter_id=w.fk_transporterid
JOIN transportation tran ON tran.fk_transporter_id=tr.transporter_id
JOIN orders o ON tran.fk_order_id=o.order_id;
```

```

1 SELECT captain_id,captain_name,tran.fk_order_id,o.order_name FROM captain cp
2 JOIN waterttransport w ON w.ship_id=cp.fk_shipid
3 JOIN transporter tr ON tr.transporter_id=w.fk_transporterid
4 JOIN transportation tran ON tran.fk_transporter_id=tr.transporter_id
5 JOIN orders o ON tran.fk_order_id=o.order_id;
6

```

Data Output	Explain	Messages	Notifications
 captain_id integer	 captain_name character varying (30)	fk_order_id integer	order_name character varying (30)
1	201 Robert	2021040027	Factory Parts Transportation
2	201 Robert	2021110005	Toys Transportation
3	201 Robert	2021110005	Toys Transportation
4	202 Joseph	2021090019	Coal Transportation
5	203 Felix	2021090029	Fruits Transportation
6	203 Felix	2021010016	Televisions Transportation
7	203 Felix	2021060006	Clothing Transportation

Query 10: Time taken for transportation of each order

```
SELECT o.order_id,o.order_name,o.fk_client_gst_no,tr.pickup_date,tr.destination_date,
(tr.destination_date::date - tr.pickup_date::date) as Duration_of_transport
FROM transportation tr
JOIN orders o ON tr.fk_order_id=o.order_id ;
```

```

1 SELECT o.order_id,o.order_name,o.fk_client_gst_no,tr.pickup_date,tr.destination_date,
2 (tr.destination_date::date - tr.pickup_date::date) as Duration_of_transport
3 FROM transportation tr
4 JOIN orders o ON tr.fk_order_id=o.order_id ;

```

Data Output Explain Messages Notifications

	order_id integer	order_name character varying (30)	fk_client_gst_no character varying (15)	pickup_date date	destination_date date	duration_of_transport integer
1	2021010001	Car Transportation	07AAAAA0000A0Z0	2021-01-26	2021-02-15	20
2	2021020003	Shoes Transportation	27SEXYR6969A1Z4	2021-02-10	2021-02-15	5
3	2021020011	Machinery Transportation	24ABCDE1234F1Z5	2021-02-14	2021-02-28	14
4	2021050015	Kerosene Transportation	29BBBBB1111B1Z1	2021-05-27	2021-06-05	9
5	2021070020	Meat Transportation	27SEXYR6969A1Z4	2021-08-05	2021-08-10	5
6	2021100018	Paper Transportation	07AAAAA0000A0Z0	2021-10-30	2021-11-04	5
7	2021110005	Toys Transportation	03BBBBB1111B1Z1	2021-11-22	2021-12-06	14
8	2021070012	Wine Transportation	03BBBBB1111B1Z1	2021-07-15	2021-07-25	10
9	2021090019	Coal Transportation	24ABCDE1234F1Z5	2021-09-23	2021-10-10	17
10	2021060006	Clothing Transportation	29BBBBB1111B1Z1	2021-07-05	2021-07-12	7
11	2021090010	Gas-Based Fuels Transportation	29BBBBB1111B1Z1	2021-10-28	2021-11-06	9
12	2021110013	Grain Transportation	07AAAAA0000A0Z0	2021-11-20	2021-11-29	9
13	2021030017	Sugar Transportation	03BBBBB1111B1Z1	2021-03-20	2021-04-10	21
14	2021010016	Televisions Transportation	27SEXYR6969A1Z4	2021-10-28	2021-11-12	15
15	2021110005	Toys Transportation	03BBBBB1111B1Z1	2021-11-27	2021-12-04	7

Query 11: Client Order Details

```
CREATE OR REPLACE FUNCTION view_details (gst_no varchar)
```

```
RETURNS TABLE(
```

```
    client_name VARCHAR,
```

```
    client_mobilenno VARCHAR,
```

```
    client_emailid VARCHAR,
```

```
    order_id INTEGER,
```

```
    order_name VARCHAR
```

```
)
```

```
LANGUAGE plpgsql
```

```
AS $$
```

```
BEGIN
```

```
    RETURN QUERY
```

```
        SELECT
```

```
            client.client_name,client.client_mobilenno,client.client_emailid,order
            s.order_id,orders.order_name
```

```
        FROM
```



```

        orders
    JOIN
        client ON client.client_gst_no=orders.fk_client_gst_no
    WHERE
        client.client_gst_no ILIKE gst_no;

END;$$

```

```
SELECT view_details('24ABCDE1234F1Z5');
```

1	SELECT view_details('24ABCDE1234F1Z5');
2	
Data Output Explain Messages Notifications	
	<div>view_details</div> <div>record</div> <div></div>
1	(Dhvani,9932376544,dhvani123@gmail.com,2021080004,"Aluminium Transportation")
2	(Dhvani,9932376544,dhvani123@gmail.com,2021030008,"Oil Transportation")
3	(Dhvani,9932376544,dhvani123@gmail.com,2021020011,"Machinery Transportation")
4	(Dhvani,9932376544,dhvani123@gmail.com,2021120014,"Bus Transportation")
5	(Dhvani,9932376544,dhvani123@gmail.com,2021090019,"Coal Transportation")

Query 12: Which mode of transportation is being used most?

```
CREATE OR REPLACE FUNCTION mode_of_transport ()  
  
RETURNS VARCHAR  
  
language plpgsql  
  
as $$  
  
DECLARE  
  
    transport VARCHAR;  
  
    air integer;  
  
    water integer;  
  
    road integer;  
  
BEGIN  
  
    SELECT COUNT(tran.trans_id) INTO air FROM airtransport ar  
    JOIN transporter tr ON tr.transporter_id=ar.fk_transporterid  
    JOIN transportation tran ON tran.fk_transporter_id=tr.transporter_id;  
  
  
    SELECT COUNT(tran.trans_id) INTO road FROM roadtransport rd  
    JOIN transporter tr ON tr.transporter_id=rd.fk_transporterid  
    JOIN transportation tran ON tran.fk_transporter_id=tr.transporter_id;  
  
  
    SELECT COUNT(tran.trans_id) INTO water FROM watertransport wt  
    JOIN transporter tr ON tr.transporter_id=wt.fk_transporterid  
    JOIN transportation tran ON tran.fk_transporter_id=tr.transporter_id;  
  
  
    IF (air > water ) AND (air > road) THEN  
        transport = 'Air Transport was Used the most';  
  
    ELSIF (water = air) AND (water = road) THEN  
        transport = 'All Modes of Tansport were used equally';  
  
    ELSIF (air = road) OR (air = water) THEN  
        transport = 'Two Modes of Transport were Used the most';  
  
    ELSIF (road > air) AND (road > water) THEN  
        transport = 'Road Transport was Used the most';
```

```

ELSIF (road = air) OR (road = water) THEN

    transport = 'Two Modes of Transport were Used the most';

ELSIF (water > air) AND (water > road) THEN

    transport = 'Water Transport was Used the most';

END IF;

RETURN transport;

end;$$

```

```
SELECT mode_of_transport()
```

1 **SELECT** mode_of_transport()

	Data Output	Explain	Messages	Notifications
	<div>mode_of_transport</div> <div>character varying</div> <div></div>			
1	Water Transport was Used the most			

Query 13: Between the given date which region has max receiver

```

SELECT tr.destination_location FROM transportation tr

WHERE tr.destination_date

BETWEEN '2021-11-01' AND '2021-11-30'

GROUP BY tr.destination_location

ORDER BY COUNT(*) DESC LIMIT 1;

```

1 SELECT tr.destination_location FROM transportation tr
2 WHERE tr.destination_date
3 BETWEEN '2021-11-01' AND '2021-11-30'
4 GROUP BY tr.destination_location
5 ORDER BY COUNT(*) DESC LIMIT 1;
6

Data Output Explain Messages Notifications

	destination_location character varying (40)	
1	Delhi	

Query 14: List the employee having highest salary

```
SELECT e.e_id,e.e_name,d.dept_id,d.dept_name,e.e_salary FROM employee e
JOIN department d ON d.dept_id=e.fk_dept_id
WHERE e.e_salary=(SELECT MAX(e.e_salary) FROM employee e);
```

```

1 SELECT e.e_id,e.e_name,d.dept_id,d.dept_name,e.e_salary FROM employee e
2 JOIN department d ON d.dept_id=e.fk_dept_id
3 WHERE e.e_salary=(SELECT MAX(e.e_salary) FROM employee e);
4
5

```

Data Output

Explain

Messages

Notifications

	e_id	e_name	dept_id	dept_name	e_salary
	integer	character varying (30)	integer	character varying (30)	integer
1	8	Krish	1	Management	70000







Query 15: Most Expensive Order

```
SELECT o.*,tr.t_amount FROM client cl
JOIN orders o ON o.fk_client_gst_no=cl.client_gst_no
JOIN transactions tr ON tr.fk_order_id=o.order_id
WHERE tr.t_amount=(SELECT MAX(tr.t_amount) FROM transactions tr);
```

```

1 SELECT o.*,tr.t_amount FROM client cl
2 JOIN orders o ON o.fk_client_gst_no=cl.client_gst_no
3 JOIN transactions tr ON tr.fk_order_id=o.order_id
4 WHERE tr.t_amount=(SELECT MAX(tr.t_amount) FROM transactions tr);
5

```

Data Output		Explain	Messages	Notifications	
	order_id integer 	order_name character varying (30) 	fk_client_gst_no character varying (15) 	fk_e_id integer 	t_amount numeric (9,2) 
1	2021090019	Coal Transportation	24ABCDE1234F1Z5	1	70000.00

Query 16: List Male Employees working for the company for more than 10 years.

```
SELECT e.* FROM employee e
```

WHERE (CURRENT_DATE::date - e.e_joindate::date)>3650 AND e.e_gender LIKE 'Male';

```
1 SELECT e.* FROM employee e
2 WHERE (CURRENT_DATE::date - e.e_joindate::date)>3650 AND e.e_gender LIKE 'Male';
3
```

Data Output	Explain	Messages	Notifications						
	 e_id [PK] integer	 e_name character varying (30)	 e_gender character varying (10)	 e_phoneno character varying (10)	 e_joindate date	 e_role character varying (20)	 e_salary integer	 fk_dept_id integer	
1	7	Bhaves	Male	9134567023	2008-05-13	Business consultant	40000		6
2	8	Krish	Male	7456286488	2007-11-26	COO	70000		1

Query 17: List of International Clients.

```
SELECT client_gst_no,client_name,client_country FROM client
```

```
WHERE client_country<>'India';
```

```
1 SELECT client_gst_no,client_name,client_country FROM client
2 WHERE client_country<>'India';
3
```

Data Output		Explain	Messages	Notifications
	client_gst_no [PK] character varying (1)	client_name character varying (30)	client_country character varying (80)	
1	27SEXYR6969A1Z4	Elon Musk	USA	
2	29BBBBB1111B1Z1	Jeff Bezos	Australia	

Query 18: Clients and orders details of all the failed transactions.

```
SELECT tr.t_id,tr.t_amount,tr.t_date,o.order_id,cl.client_gst_no,cl.client_name,tr.t_status
```


FROM transactions tr

JOIN orders o ON o.order_id=tr.fk_order_id

JOIN client cl ON cl.client_gst_no=o.fk_client_gst_no

```
WHERE tr.t  status='failed';
```

```
1 SELECT tr.t_id,tr.t_amount,tr.t_date,o.order_id,cl.client_gst_no,cl.client_name,tr.t_status
2 FROM transactions tr
3 JOIN orders o ON o.order_id=tr.fk_order_id
4 JOIN client cl ON cl.client_gst_no=o.fk_client_gst_no
5 WHERE tr.t_status='failed';
6
```

Data Output		Explain	Messages	Notifications							
	t_id integer		t_amount numeric (9,2)	t_date date		order_id integer		client_gst_no character varying (15)	client_name character varying (30)		t_status character varying (15)
1	3		10000.33	2021-05-11		2021050002		03BBBBB1111B1Z1	Arijit Singh		failed
2	11		22000.78	2021-03-30		2021030008		24ABCDE1234F1Z5	Dhvani		failed
3	21		33000.34	2021-09-23		2021090021		24FGHIJ3456L6O9	Ravi		failed

Query 19: All the available vehicles with Loading Capacity more than 25.

```
SELECT * FROM

(SELECT ar.plane_id AS ID,(ar.airplane_name) AS Name,(ar.p_loading_capacity) AS
loading_capacity FROM airtransport ar

UNION




SELECT rd.vehicle_no, rd.v_name, rd.v_loading_capacity FROM roadtransport rd

UNION

SELECT wt.ship_id,s_name,wt.s_loading_capacity FROM watertransport wt) lc

WHERE loading_capacity>25;
```

```
1 SELECT * FROM
2 (SELECT ar.plane_id AS ID,(ar.airplane_name) AS Name,
3 (ar.p_loading_capacity) AS loading_capacity FROM airtransport ar
4 UNION
5 SELECT rd.vehicle_no, rd.v_name, rd.v_loading_capacity FROM roadtransport rd
6 UNION
7 SELECT wt.ship_id,s_name,wt.s_loading_capacity FROM watertransport wt) lc
8 WHERE loading_capacity>25;
9
```

	Data Output	Explain	Messages	Notifications
	 id integer	 name character varying (30)	 loading_capacity integer	
1	2781	AIRBUS A300 B4F	43	
2	2314563	Algoma Mariner	29	
3	4515731	Akebono Maru	29	
4	9865	BOEING MD 11F	85	
5	3578014	MS Antenor	27	

Query 20:

- **List of all vehicles older than 10 years**

```
SELECT rd.* FROM roadtransport rd

WHERE (CURRENT_DATE::date - rd.purchase_date::date)>3650;
```

```

1 SELECT rd.* FROM roadtransport rd
2 WHERE (CURRENT_DATE::date - rd.purchase_date::date)>3650;
3

```

	vehicle_no	v_name	v_loading_capacity	purchase_date	fk_transporterid
	[PK] integer	character varying (30)	integer	date	integer
1	7005	TATA TAURUS	21	2008-10-06	3
2	6783	Ashok Leyland	7	2010-05-25	1

- List of all ships older than 25 years

```
SELECT wt.* FROM watertransport wt
```

```
WHERE (CURRENT_DATE::date - wt.purchase_date::date)>9125;
```

```

1 SELECT wt.* FROM watertransport wt
2 WHERE (CURRENT_DATE::date - wt.purchase_date::date)>9125;
3

```

	ship_id	purchase_date	s_name	s_loading_capacity	crew_size	fk_transporterid
	[PK] integer	date	character varying (30)	integer	integer	integer
1	4515731	1990-02-23	Akebono Maru	29	22	4

- List of all plane older than 20 years

```
SELECT ar.* FROM airtransport ar
```

```
WHERE (CURRENT_DATE::date - ar.purchase_date::date)>7300;
```

```

1 SELECT ar.* FROM airtransport ar
2 WHERE (CURRENT_DATE::date - ar.purchase_date::date)>7300;
3

```

	plane_id	purchase_date	airplane_name	p_loading_capacity	fk_transporterid
	[PK] integer	date	character varying (30)	integer	integer
1	2781	2000-01-10	AIRBUS A300 B4F	43	7