

YAMUNA DAY5 ASSIGNMENTS

1. GROUP BY with WHERE - Orders by Year and Quarter

Display, order year, quarter, order count, avg freight cost only for those orders where freight cost > 100

select

extract(year from order_date) as order_year,

extract(quarter from order_date) as order_quarter,

count(*) as order_count,

round(cast(avg(freight) as numeric), 2) as average_freight_cost

from

orders

where

freight > 100

group by

order_year,

order_quarter

order by

order_year,

order_quarter;

	order_year numeric	order_quarter numeric	order_count bigint	average_freight_cost numeric
1	1996	3	12	163.84
2	1996	4	22	203.85
3	1997	1	14	232.65
4	1997	2	21	269.55
5	1997	3	26	236.44
6	1997	4	33	206.75
7	1998	1	43	245.48
8	1998	2	16	292.79

2. GROUP BY with HAVING - High Volume Ship Regions

Display, ship region, no of orders in each region, min and max freight cost

Filter regions where no of orders ≥ 5

```
select ship_region, count(*) as num_orders, min(freight), max(freight)
```

```
from orders
```

```
group by ship_region
```

```
having count(*)  $\geq 5$ 
```

```
order by num_orders desc;
```

	ship_region character varying (15) 🔒	num_orders bigint 🔒	min real 🔒	max real 🔒
1	[null]	507	0.02	1007.64
2	SP	49	0.14	890.78
3	RJ	34	2.27	193.37
4	ID	31	8.19	830.75
5	OR	28	0.2	719.78
6	Co. Cork	19	16.74	603.54
7	WA	19	4.56	606.19
8	Táchira	18	2.08	210.19
9	NM	18	8.53	708.95
10	BC	17	0.94	243.73
11	Lara	14	0.12	163.97
12	Québec	13	4.07	379.13
13	Essex	13	3.04	146.32
14	Nueva Esparta	12	2.71	158.44
15	Isle of Wight	10	0.9	154.72
16	AK	10	5.24	257.62
17	WY	9	4.34	195.68

3. Get all title designations across employees and customers (Try UNION & UNION ALL)

select title from employees

select title from employees

UNION

select contact_title from customers;

	title character varying (30) 
1	Owner
2	Sales Associate
3	Sales Agent
4	Inside Sales Coordinator
5	Marketing Manager
6	Assistant Sales Agent
7	Assistant Sales Representative
8	Accounting Manager
9	Vice President, Sales
10	Sales Manager
11	Sales Representative
12	Marketing Assistant
13	Owner/Marketing Assistant
14	Order Administrator

select title from employees

UNION ALL

select contact_title from customers;

	title character varying (30) 
1	Sales Representative
2	Vice President, Sales
3	Sales Representative
4	Sales Representative
5	Sales Manager
6	Sales Representative
7	Sales Representative
8	Inside Sales Coordinator
9	Sales Representative
10	Sales Representative
11	Owner
12	Owner
13	Sales Representative
14	Order Administrator
15	Sales Representative
16	Marketing Manager
17	Owner
18	Owner
19	Accounting Manager
20	Sales Representative
21	Sales Agent
22	Marketing Manager
23	Owner

4. Find categories that have both discontinued and in-stock products
(Display category_id, instock means units_in_stock > 0, Intersect)

```
select category_id, units_in_stock as instock
```

from products

where units_in_stock > 0

INTERSECT

select category_id, units_in_stock as instock

from products

where discontinued = 0

order by instock;

	category_id smallint 🔒	instock smallint 🔒
1	3	3
2	7	4
3	2	4
4	8	5
5	3	6
6	2	6
7	4	9
8	8	10
9	3	10
10	8	11
11	2	13
12	4	14
13	7	15
14	1	15
15	3	15
16	3	17
17	1	17
18	4	19
19	1	20
20	7	20
21	5	21
22	6	21
23	4	22

5. Find orders that have no discounted items (Display the order_id, EXCEPT)

```
select order_id
```


```
from orders
```

```
Except
```

```
select distinct order_id
```

```
from order_details
```

```
where discount = 1;
```

	order_id smallint 
1	11038
2	10782
3	10725
4	10423
5	10518
6	10356
7	10963
8	10596
9	10282
10	10658
11	10283
12	10579
13	10693
14	10896
15	10660
16	10253
17	10425
18	10774
19	10615
20	10514
21	10850
22	10276
23	10978
Total rows: 830	