LeetCode SQL 50

Basic Aggregate Functions

Created by: Bhawna Gupta

620. Not Boring Movies

Input:

Cinema table:

id	movie	description	rating
1	War	great 3D	8.9
2	Science	fiction	8.5
3	irish	boring	6.2
4	Ice song	Fantacy	8.6
5	House card	Interesting	9.1

Output:

id	movie	description	rating
5	House card	Interesting	9.1
1	War	great 3D	8.9

```sql
Select *
From Cinema
Where
  (id % 2)!= 0
  And description != 'boring'
Order by
  rating DESC;
```

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1251. Average Selling Price

Input:

Prices table:

product_id	start_date	end_date	price
1	2019-02-17	2019-02-28	5
1	2019-03-01	2019-03-22	20
2	2019-02-01	2019-02-20	15
2	2019-02-21	2019-03-31	30

UnitsSold table:

product_id	purchase_date	units
1	2019-02-25	100
1	2019-03-01	15
2	2019-02-10	200
2	2019-03-22	30

Output:

product_id	average_price
1	6.96
2	16.96

```sql
Select
  p.product_id, COALESCE(
    Round(sum(p.price * u.units)/ sum(u.units), 2), 0)
    As average_price
From
  Prices p
  Left Join UnitsSold u On p.product_id = u.product_id
Where
  u.purchase_date Between p.start_date
  And p.end_date
  Or p.product_id NOT IN (
    select
      u.product_id
    from
      UnitsSold u)
Group By
  p.product_id;
```

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1075. Project Employees I

Input:

Project table:

project_id	employee_id
1	1
1	2
1	3
2	1
2	4

Employee table:

employee_id	name	experience_years
1	Khaled	3
2	Ali	2
3	John	1
4	Doe	2

Output:

project_id	average_years
1	2.00
2	2.50

```sql
Select
  p.project_id,
  Round((Sum(e.experience_years)/ Count(p.project_id)),2)
  As average_years
From
  Project p
  Join Employee e On p.employee_id = e.employee_id
Group by
  p.project_id;
```

Created by: Bhawna Gupta

1633. Percentage of Users Attended a Contest

Input:
Users table:

user_id	user_name
6	Alice
2	Bob
7	Alex

Register table:

contest_id	user_id
215	6
209	2
208	2
210	6
208	6
209	7
209	6
215	7
208	7
210	2
207	2
210	7

```
Select
  contest_id,
  round(((Count(user_id)/(
          select count(user_id)
          from Users
        ))* 100),2) As percentage
From Register
Group by contest_id
Order by
  percentage DESC,
  contest_id ASC;
```

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1211. Queries Quality and Percentage

Input:
Queries table:

query_name	result	position	rating
Dog	Golden Retriever	1	5
Dog	German Shepherd	2	5
Dog	Mule	200	1
Cat	Shirazi	5	2
Cat	Siamese	3	3
Cat	Sphynx	7	4

Output:

query_name	quality	poor_query_percentage
Dog	2.50	33.33
Cat	0.66	33.33

```sql
Select
  query_name,
  Round(Avg(rating / position),2) As quality,
  Round(AVG(if((rating < 3), 1,0))* 100, 2)
  As poor_query_percentage
from
  Queries
Where query_name Is Not Null
Group by
  query_name;
```

Created by: Bhawna Gupta

1193. Monthly Transactions I

Input:
Transactions table:

id	country	state	amount	trans_date
121	US	approved	1000	2018-12-18
122	US	declined	2000	2018-12-19
123	US	approved	2000	2019-01-01
124	DE	approved	2000	2019-01-07

Output:

month	country	trans_count	approved_count	trans_total_amount	approved_total_amount
2018-12	US	2	1	3000	1000
2019-01	US	1	1	2000	2000
2019-01	DE	1	1	2000	2000

```
Select
  date_format(trans_date, "%Y-%m") as month,
  country,
  count(trans_date) As trans_count,
  sum(
    if(state = 'approved', 1, 0)
  ) as approved_count,
  sum(amount) as trans_total_amount,
  sum(
    if(state = 'approved', amount, 0)
  ) as approved_total_amount
From
  Transactions
Group by
  month,
  country;
```

Created by: Bhawna Gupta

1174. Immediate Food Delivery II

Input:
Delivery table:

delivery_id	customer_id	order_date	customer_pref_delivery_date
1	1	2019-08-01	2019-08-02
2	2	2019-08-02	2019-08-02
3	1	2019-08-11	2019-08-12
4	3	2019-08-24	2019-08-24
5	3	2019-08-21	2019-08-22
6	2	2019-08-11	2019-08-13
7	4	2019-08-09	2019-08-09

Output:

immediate_percentage
50.00

```sql
Select
  Round(Avg(If(order_date = customer_pref_delivery_date,1,0)* 100),2)
  As immediate_percentage
From
  Delivery
Where
  (customer_id, order_date) In
  (Select
      customer_id,
      min(order_date)
    from Delivery
    group by customer_id);
```

Created by: Bhawna Gupta

550. Game Play Analysis IV

Input:
Activity table:

player_id	device_id	event_date	games_played
1	2	2016-03-01	5
1	2	2016-03-02	6
2	3	2017-06-25	1
3	1	2016-03-02	0
3	4	2018-07-03	5

Output:

fraction
0.33

```
Select
  Round(Count(Distinct player_id)/
  (Select Count(Distinct player_id)
      from Activity),2) As fraction
From Activity
Where
  (player_id, event_date) in (
    Select
      player_id,
      date_add(
        min(event_date),
        interval 1 day)
    from activity
    group by player_id);
```

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