

Day 1 of SQL Advent Calendar

Today's Question:

A ski resort company want to know which customers rented ski equipment for more than one type of activity (e.g., skiing and snowboarding). List the customer names and the number of distinct activities they rented equipment for.

Table name: rentals

rental_id	customer_name	activity	rental_date
1	Emily	Skiing	2024-01-01
2	Michael	Snowboarding	2024-01-02
3	Emily	Snowboarding	2024-01-03
4	Sarah	Skiing	2024-01-01
5	Michael	Skiing	2024-01-02
6	Michael	Snowtubing	2024-01-02

Question level of difficulty: Medium

Write your SQL query here ⓘ

```
1 SELECT customer_name, count(DISTINCT(activity)) AS "distinct"
2 FROM rentals
3 GROUP BY customer_name
4 HAVING count(DISTINCT(activity)) >1;
```

Is your query correct?

[Submit Answer](#)

CUSTOMER_NAME	DISTINCT ACTIVITIES
Emily	2
Michael	3

Correct!! 🎉 Great work!

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```
SELECT customer_name, count(DISTINCT(activity)) AS "distinct
activities"
FROM rentals
GROUP BY customer_name
HAVING count(DISTINCT(activity)) >1;
```

Day 2 of SQL Advent Calendar

Today's Question:

Santa wants to know which gifts weigh more than 1 kg. Can you list them?

Table name: gifts

gift_name	recipient	weight_kg
Toy Train	John	2.5
Chocolate Box	Alice	0.8
Teddy Bear	Sophia	1.2
Board Game	Liam	0.9

Question level of difficulty: Easy

Write your SQL query here ⓘ

```
1 SELECT gift_name
2 FROM gifts
3 WHERE weight_kg >1;
```

Is your query correct?

[Submit Answer](#)

GIFT_NAME
Toy Train
Teddy Bear

Correct!! 🎉 Great work!

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```
SELECT gift_name
FROM gifts
WHERE weight_kg >1;
```



Day 3 of SQL Advent Calendar

Today's Question:
You're trying to identify the most calorie-packed candies to avoid during your holiday binge. Write a query to rank candies based on their calorie count within each category. Include the candy_name, candy_category, calories, and rank (rank_in_category) within the category.

Table name: candy_nutrition

candy_id	candy_name	calories	candy_category
1	Candy Cane	200	Sweets
2	Chocolate Bar	250	Chocolate
3	Gingerbread Cookie	150	Baked Goods
4	Lollipop	100	Sweets
5	Dark Chocolate Truffle	180	Chocolate
6	Marshmallow	900	Sweets
7	Sugar Cookie	140	Baked Goods

Question level of difficulty: Hard 🎅🎄🎅

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Write your SQL query here ⓘ

```
1 SELECT
2   candy_name,
3   candy_category,
4   calories,
5   RANK() over (PARTITION BY candy_category ORDER BY calories
6   DESC) AS rank_in_category
7   FROM candy_nutrition;
```

Is your query correct?

[Submit Answer](#)

Chocolate Bar	Chocolate	250	1
Dark Chocolate Truffle	Chocolate	180	2
Marshmallow	Sweets	900	1
Candy Cane	Sweets	200	2
Lollipop	Sweets	100	3

Correct!! 🎉 Great work!

```
SELECT
  candy_name,
  candy_category,
  calories,
  RANK() over (PARTITION BY candy_category ORDER BY calories
DESC) AS rank_in_category
FROM candy_nutrition;
```

Day 4 of SQL Advent Calendar

Today's Question:

You're planning your next ski vacation and want to find the best regions with heavy snowfall. Given the tables resorts and snowfall, find the average snowfall for each region and sort the regions in descending order of average snowfall. Return the columns region and average_snowfall.

Table name: ski_resorts

resort_id	resort_name	region
1	Snowy Peaks	Rocky Mountains
2	Winter Wonderland	Wasatch Range
3	Frozen Slopes	Alaska Range
4	Powder Paradise	Rocky Mountains

Table name: snowfall

resort_id	snowfall_inches
1	60
2	45
3	75
4	55

Question level of difficulty: Medium 🎅🎄🎁

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Write your SQL query here ⓘ

```
1 SELECT s.region, AVG(f.snowfall_inches) AS average_snowfall
2 FROM ski_resorts s
3 JOIN snowfall f ON s.resort_id = f.resort_id
4 GROUP BY s.region
5 ORDER BY average_snowfall DESC;
6
```

Is your query correct?

[Submit Answer](#)

REGION	AVERAGE_SNOWFALL
Alaska Range	75
Rocky Mountains	57.5
Wasatch Range	45

Correct!! 🎉 Great work!

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```
SELECT s.region, AVG(f.snowfall_inches) AS average_snowfall
FROM ski_resorts s
JOIN snowfall f ON s.resort_id = f.resort_id
GROUP BY s.region
ORDER BY average_snowfall DESC;
```

Day 5 of SQL Advent Calendar

Today's Question:

This year, we're celebrating Christmas in the Southern Hemisphere! Which beaches are expected to have temperatures above 30°C on Christmas Day?

Table name: beach_temperature_predictions

beach_name	country	expected_temperature_c	date
Bondi Beach	Australia	32	2024-12-24
Copacabana Beach	Brazil	28	2024-12-24
Clifton Beach	South Africa	31	2024-12-25
Brighton Beach	New Zealand	25	2024-12-25

Question level of difficulty: Easy 🎅🎄🎁

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Write your SQL query here ⓘ

```
1 SELECT beach_name
2 FROM beach_temperature_predictions
3 WHERE date = '2024-12-25'
4 AND expected_temperature_c > 30;
```

Is your query correct?

[Submit Answer](#)

BEACH_NAME
Clifton Beach

Correct!! 🎉 Great work!

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```
SELECT beach_name
FROM beach_temperature_predictions
WHERE date ='2024-12-25'
AND expected_temperature_c > 30;
```



Day 6 of SQL Advent Calendar

Today's Question:
Scientists are tracking polar bears across the Arctic to monitor their migration patterns and caloric intake. Write a query to find the top 3 polar bears that have traveled the longest total distance in December 2024. Include their bear_id, bear_name, and total_distance_traveled in the results.

Table name: polar_bears

bear_id	bear_name	age
1	Snowball	10
2	Frosty	7
3	Iceberg	15
4	Chilly	5

Table name: tracking

tracking_id	bear_id	distance_km	date
1	1	25	2024-12-01
2	2	40	2024-12-02
3	1	30	2024-12-03
4	3	50	2024-12-04
5	2	35	2024-12-05
6	4	20	2024-12-06

Write your SQL query here ⓘ

```
1 SELECT p.bear_id, p.bear_name,
2     sum(t.distance_km) AS total_distance_traveled
3     FROM polar_bears p
4     JOIN tracking t
5     ON p.bear_id=t.bear_id
6     WHERE t.date BETWEEN '2024-12-01' AND '2024-12-31'
7     GROUP BY p.bear_id, p.bear_name
8     ORDER BY total_distance_traveled DESC
9     LIMIT 3;
```

Is your query correct? ⓘ

Submit Answer

BEAR_ID	BEAR_NAME	TOTAL_DISTANCE_TRAVELED
3	Iceberg	105
1	Snowball	100
2	Frosty	75

Correct! 🎉 Great work!

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```
SELECT p.bear_id, p.bear_name,
sum(t.distance_km) AS total_distance_traveled
FROM polar_bears p
JOIN tracking t
ON p.bear_id=t.bear_id
WHERE t.date BETWEEN '2024-12-01' AND '2024-12-31'
GROUP BY p.bear_id, p.bear_name
ORDER BY total_distance_traveled DESC
LIMIT 3;
```

Day 7 of SQL Advent Calendar

Today's Question:

The owner of a winter market wants to know which vendors have generated the highest revenue overall. For each vendor, calculate the total revenue for all their items and return a list of the top 2 vendors by total revenue. Include the vendor_name and total_revenue in your results.

Table name: vendors

vendor_id	vendor_name	market_location
1	Cozy Crafts	Downtown Square
2	Sweet Treats	Central Park
3	Winter Warmers	Downtown Square

Table name: sales

sale_id	vendor_id	item_name	quantity_sold	price_per_unit
1	1	Knitted Scarf	15	25
2	2	Hot Chocolate	50	3.5
3	3	Wool Hat	20	18
4	1	Handmade Ornament	10	15
5	2	Gingerbread Cookie	30	5

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Write your SQL query here ⓘ

```

1  SELECT v.vendor_name, SUM(s.quantity_sold*s.price_per_unit)
2  AS total_revenue
3  FROM vendors v JOIN sales s
4  ON v.vendor_id=s.vendor_id
5  GROUP BY v.vendor_name
6  ORDER BY total_revenue DESC
7  LIMIT 2;

```

Is your query correct?

[Submit Answer](#)

VENDOR_NAME	TOTAL_REVENUE
Cozy Crafts	525
Winter Warmers	360

Correct!! 🎉 Great work!

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```

SELECT v.vendor_name, SUM(s.quantity_sold*s.price_per_unit)
AS total_revenue
FROM vendors v JOIN sales s
ON v.vendor_id=s.vendor_id
GROUP BY v.vendor_name
ORDER BY total_revenue DESC
LIMIT 2;

```

Day 8 of SQL Advent Calendar

Today's Question:

You are managing inventory in Santa's workshop. Which gifts are meant for "good" recipients? List the gift name and its weight.

Table name: gifts

gift_id	gift_name	recipient_type	weight_kg
1	Toy Train	good	2.5
2	Lumps of Coal	naughty	1.5
3	Teddy Bear	good	1.2
4	Chocolate Bar	good	0.3
5	Board Game	naughty	1.8

Question level of difficulty: Easy 🎅Santa Claus🎅

Write your SQL query here ⓘ

```

1  SELECT gift_name, weight_kg
2  FROM gifts
3  WHERE recipient_type = 'good';

```

Is your query correct?

[Submit Answer](#)

GIFT_NAME	WEIGHT_KG
Toy Train	2.5
Teddy Bear	1.2
Chocolate Bar	0.3

Correct!! 🎉 Great work!

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```
SELECT gift_name, weight_kg
FROM gifts
WHERE recipient_type = 'good';
```

Day 9 of SQL Advent Calendar

Today's Question:

A community is hosting a series of festive feasts, and they want to ensure a balanced menu. Write a query to identify the top 3 most calorie-dense dishes (calories per gram) served for each event. Include the dish_name, event_name, and the calculated calorie density in your results.

Table name: events

event_id	event_name
1	Christmas Eve Dinner
2	New Years Feast
3	Winter Solstice Potluck

Table name: menu

dish_id	dish_name	event_id	calories	weight_g
1	Roast Turkey	1	3500	5000
2	Chocolate Yule Log	1	2200	1000
3	Cheese Fondue	2	1500	800
4	Holiday Fruitcake	3	4000	1200
5	Honey Glazed Ham	2	2800	3500

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Write your SQL query here ⓘ

```
1 WITH CalorieDensity AS (
2     SELECT
3         m.dish_name,
4         e.event_name,
5         CAST(m.calories AS FLOAT) / m.weight_g AS calorie_den
6     FROM menu m
7     JOIN events e ON m.event_id = e.event_id
8 ),
9 RankedDishes AS (
10     SELECT
11         dish_name,
12         event_name,
```

Is your query correct?

[Submit Answer](#)

Calorie-Dense Dishes	Event	Calorie Density
Roast Turkey	Christmas Eve Dinner	0.7
Cheese Fondue	New Years Feast	1.875
Honey Glazed Ham	New Years Feast	0.8
Holiday Fruitcake	Winter Solstice Potluck	3.3333333333333335

Correct! 🎉 Great work!

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```
WITH CalorieDensity AS (
    SELECT
        m.dish_name,
        e.event_name,
        CAST(m.calories AS FLOAT) / m.weight_g AS
calorie_density
    FROM menu m
    JOIN events e ON m.event_id = e.event_id
),
RankedDishes AS (
    SELECT
        dish_name,
        event_name,
        calorie_density,
        ROW_NUMBER() OVER (PARTITION BY event_name ORDER BY
calorie_density DESC) AS rank
    FROM CalorieDensity
```

```
)
SELECT
    dish_name,
    event_name,
    calorie_density
FROM RankedDishes
WHERE rank <= 3
ORDER BY event_name, rank;
```

Day 10 of SQL Advent Calendar

Today's Question:
You are tracking your friends' New Year's resolution progress. Write a query to calculate the following for each friend: number of resolutions they made, number of resolutions they completed, and success percentage (% of resolutions completed) and a success category based on the success percentage:
 - **Green:** If success percentage is greater than 75%.
 - **Yellow:** If success percentage is between 50% and 75% (inclusive).
 - **Red:** If success percentage is less than 50%.

Table name: resolutions

resolution_id	friend_name	resolution	is_completed
1	Alice	Exercise daily	1
2	Alice	Read 20 books	0
3	Bob	Save money	0
4	Bob	Eat healthier	1
5	Charlie	Travel more	1
6	Charlie	Learn a new skill	1
7	Diana	Volunteer monthly	1
8	Diana	Drink more	0

Write your SQL query here ⓘ

```

1  SELECT
2      friend_name,
3      COUNT(*) AS total_resolutions,
4      SUM(is_completed) AS completed_resolutions,
5      ROUND((SUM(is_completed) * 100.0) / COUNT(*), 2) AS success_percentage
6      CASE
7          WHEN (SUM(is_completed) * 100.0) / COUNT(*) > 75 THEN 'Green'
8          WHEN (SUM(is_completed) * 100.0) / COUNT(*) BETWEEN 50 AND 75 THEN 'Yellow'
9          ELSE 'Red'
10     END AS success_category
11  FROM
12      resolutions
```

Is your query correct?

Submit Answer

friend_name	total_resolutions	completed_resolutions	success_percent
Alice	2	1	50
Bob	2	1	50
Charlie	2	2	100
Diana	3	2	66.67

Correct!! 🎉 Great work!

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```

SELECT
    friend_name,
    COUNT(*) AS total_resolutions,
    SUM(is_completed) AS completed_resolutions,
    ROUND((SUM(is_completed) * 100.0) / COUNT(*), 2) AS success_percentage,
    CASE
        WHEN (SUM(is_completed) * 100.0) / COUNT(*) > 75 THEN 'Green'
```

```

        WHEN (SUM(is_completed) * 100.0) / COUNT(*) BETWEEN 50
AND 75 THEN 'Yellow'
ELSE 'Red'
END AS success_category
FROM
    resolutions
GROUP BY
    friend_name;

```

Day 11 of SQL Advent Calendar

Today's Question:
You are preparing holiday gifts for your family. Who in the family_members table are celebrating their birthdays in December 2024? List their name and birthday.

Table name: family_members

member_id	name	relationship	birthday
1	Dawn	Sister	2024-12-24
2	Bob	Father	2024-05-20
3	Charlie	Brother	2024-12-25
4	Diana	Mother	2024-03-15

Question level of difficulty: Easy 🎅🎅🎅

Write your SQL query here ⓘ

```

1 SELECT
2     name,
3     birthday
4 FROM
5     family_members
6 WHERE
7     strftime('%Y', birthday) = '2024'
8     AND strftime('%m', birthday) = '12';
9

```

Is your query correct?

[Submit Answer](#)

NAME	BIRTHDAY
Dawn	2024-12-24
Charlie	2024-12-25

Correct!! 🎉 Great work!

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```

SELECT
    name,
    birthday
FROM
    family_members
WHERE
    strftime('%Y', birthday) = '2024'
    AND strftime('%m', birthday) = '12';

```

Day 12 of SQL Advent Calendar

Today's Question:
A collector wants to identify the top 3 snow globes with the highest number of figurines. Write a query to rank them and include their globe_name, number of figurines, and material.

Table name: snow_globes

globe_id	globe_name	volume_cm3	material
1	Winter Wonderland	500	Glass
2	Santas Workshop	300	Plastic
3	Frozen Forest	400	Glass
4	Holiday Village	600	Glass

Table name: figurines

figurine_id	globe_id	figurine_type
1	1	Snowman
2	1	Tree
3	2	Santa Claus
4	2	Elf
5	2	Gift Box
6	3	Reindeer
7	3	Tree

Write your SQL query here ⓘ

```

1 WITH RankedGlobes AS (
2     SELECT
3         globe_name,
4         COUNT(figurine_id) AS figurine_count,
5         material,
6         RANK() OVER (ORDER BY COUNT(figurine_id) DESC) AS rank
7     FROM
8         snow_globes
9     JOIN
10        figurines ON snow_globes.globe_id = figurines.globe_id
11    GROUP BY
12        globe_name,

```

Is your query correct? ⓘ

Submit Answer

GLOBE_NAME	FIGURINE_COUNT	MATERIAL
Holiday Village	5	Glass
Santas Workshop	3	Plastic
Frozen Forest	2	Glass
Winter Wonderland	2	Glass

Correct!! 🎉 Great work!

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```

WITH RankedGlobes AS (
    SELECT
        globe_name,
        COUNT(figurine_id) AS figurine_count,
        material,
        RANK() OVER (ORDER BY COUNT(figurine_id) DESC) AS rank
    FROM
        snow_globes
    JOIN
        figurines ON snow_globes.globe_id = figurines.globe_id
    GROUP BY
        globe_name,
        material
)
SELECT
    globe_name,
    figurine_count,
    material
FROM
    RankedGlobes
WHERE
    rank <= 3;

```

Day 13 of SQL Advent Calendar

Today's Question:

We need to make sure Santa's sleigh is properly balanced. Find the total weight of gifts for each recipient.

Table name: gifts

gift_id	gift_name	recipient	weight_kg
1	Toy Train	John	2.5
2	Chocolate Box	Alice	0.8
3	Teddy Bear	Sophia	1.2
4	Board Game	John	0.9

Question level of difficulty: Medium

Write your SQL query here ⓘ

```
1 SELECT
2     recipient,
3     SUM(weight_kg) AS total_weight_kg
4 FROM
5     gifts
6 GROUP BY
7     recipient;
```

Is your query correct?

[Submit Answer](#)

RECIPIENT	TOTAL_WEIGHT_KG
Alice	0.8
John	3.4
Sophia	1.2

Correct!! 🎉 Great work!

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```
SELECT
    recipient,
    SUM(weight_kg) AS total_weight_kg
FROM
    gifts
GROUP BY
    recipient;
```

Day 14 of SQL Advent Calendar

Today's Question:

Which ski resorts had snowfall greater than 50 inches?

Table name: snowfall

resort_name	location	snowfall_inches
Snowy Peaks	Colorado	60
Winter Wonderland	Utah	45
Frozen Slopes	Alaska	75

Question level of difficulty: Easy

Write your SQL query here ⓘ

```
1 SELECT resort_name
2     FROM snowfall
3     WHERE snowfall_inches > 50;
```

Is your query correct?

[Submit Answer](#)

RESORT_NAME
Snowy Peaks
Frozen Slopes

Correct!! 🎉 Great work!

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```
SELECT resort_name
FROM snowfall
WHERE snowfall_inches > 50;
```

Day 15 of SQL Advent Calendar

Today's Question:

A family reunion is being planned, and the organizer wants to identify the three family members with the most children. Write a query to calculate the total number of children for each parent and rank them. Include the parent's name and their total number of children in the result.

Table name: family_members

member_id	name	age
1	Alice	30
2	Bob	58
3	Charlie	33
4	Diana	55
5	Eve	5
6	Frank	60
7	Grace	32
8	Hannah	8
9	Ian	12
10	Jack	3

Table name: parent_child_relationships

parent_id	child_id
1	8

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Write your SQL query here ⓘ

```
1 WITH ChildCounts AS (
2     SELECT
3         pc.parent_id,
4         fm.name AS parent_name,
5         COUNT(pc.child_id) as total_children
6     FROM
7         parent_child_relationships pc
8     JOIN
9         family_members fm ON pc.parent_id = fm.member_id
10    GROUP BY
11        pc.parent_id, fm.name
12 ),
```

Is your query correct?

[Submit Answer](#)

PARENT_NAME	TOTAL_CHILDREN
Diana	2
Frank	2
Grace	2

Correct!! 🎉 Great work!

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```
WITH ChildCounts AS (
    SELECT
        pc.parent_id,
        fm.name AS parent_name,
        COUNT(pc.child_id) as total_children
    FROM
        parent_child_relationships pc
    JOIN
        family_members fm ON pc.parent_id = fm.member_id
    GROUP BY
        pc.parent_id, fm.name
),
```

```
RankedParents AS (
    SELECT
        parent_name,
        total_children,
        RANK () OVER (ORDER BY total_children DESC) AS rank
    FROM
        ChildCounts
```

```
)
SELECT
    parent_name,
    total_children
FROM
    RankedParents
WHERE
    rank <= 3;
```



Day 16 of SQL Advent Calendar

Today's Question:
As the owner of a candy store, you want to understand which of your products are selling best. Write a query to calculate the total revenue generated from each candy category.

Table name: candy_sales

sale_id	candy_name	quantity_sold	price_per_unit	category
1	Candy Cane	20	1.5	Sweets
2	Chocolate Bar	10	2	Chocolate
3	Lollipop	5	0.75	Sweets
4	Dark Chocolate Truffle	8	2.5	Chocolate
5	Gummy Bears	15	1.2	Sweets
6	Chocolate Fudge	12	3	Chocolate

Question level of difficulty: Medium 🎅🎄🎅

Write your SQL query here ⓘ

```

1 SELECT category, SUM(quantity_sold*price_per_unit) AS total_revenue
2 FROM candy_sales
3 GROUP BY category
4 ORDER BY total_revenue DESC;
```

Is your query correct?

[Submit Answer](#)

CATEGORY	TOTAL_REVENUE
Chocolate	76
Sweets	51.75

Correct! 🎉 Great work!

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```

SELECT category, SUM(quantity_sold*price_per_unit) AS
total_revenue
FROM candy_sales
GROUP BY category
ORDER BY total_revenue DESC;
```



Day 17 of SQL Advent Calendar

Today's Question:

The Grinch is planning out his pranks for this holiday season. Which pranks have a difficulty level of "Advanced" or "Expert"? List the prank name and location (both in descending order).

Table name: grinch_pranks

prank_id	prank_name	location	difficulty
1	Stealing Stockings	Whoville	Beginner
2	Christmas Tree Topple	Whoville Town Square	Advanced
3	Present Swap	Cindy Lous House	Beginner
4	Sleigh Sabotage	Mount Crumpit	Expert
5	Chimney Block	Mayors Mansion	Expert

Question level of difficulty: Easy

Write your SQL query here ⓘ

```
1 SELECT prank_name, location
2 FROM grinch_pranks
3 WHERE difficulty IN ('Advanced','Expert')
4 ORDER BY prank_name DESC, location DESC;
```

Is your query correct?

[Submit Answer](#)

PRANK_NAME	LOCATION
Sleigh Sabotage	Mount Crumpit
Christmas Tree Topple	Whoville Town Square
Chimney Block	Mayors Mansion

Correct!! 🎉 Great work!

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```
SELECT prank_name, location
FROM grinch_pranks
WHERE difficulty IN ('Advanced','Expert')
ORDER BY prank_name DESC, location DESC;
```

Day 18 of SQL Advent Calendar

Today's Question:

A travel agency is promoting activities for a "Summer Christmas" party. They want to identify the top 2 activities based on the average rating. Write a query to rank the activities by average rating.

Table name: activities

activity_id	activity_name
1	Surfing Lessons
2	Jet Skiing
3	Sunset Yoga

Table name: activity_ratings

rating_id	activity_id	rating
1	1	4.7
2	1	4.8
3	1	4.9
4	2	4.6
5	2	4.7
6	2	4.8
7	2	4.9
8	3	4.8

Write your SQL query here ⓘ

```
1 WITH AverageRatings AS (
2   SELECT
3     a.activity_id,
4     a.activity_name,
5     AVG(ar.rating) AS avg_rating
6   FROM
7     activities a
8   JOIN
9     activity_ratings ar
10  ON
11    a.activity_id = ar.activity_id
12  GROUP BY
```

Is your query correct?

[Submit Answer](#)

ACTIVITY_NAME	AVG_RATING
Sunset Yoga	4.82
Surfing Lessons	4.8

Correct!! 🎉 Great work!

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```
WITH AverageRatings AS (
```

```
SELECT
    a.activity_id,
    a.activity_name,
    AVG(ar.rating) AS avg_rating
FROM
    activities a
JOIN
    activity_ratings ar
ON
    a.activity_id = ar.activity_id
GROUP BY
    a.activity_id, a.activity_name
),
RankedActivities AS (
    SELECT
        activity_name,
        avg_rating,
        RANK () OVER ( ORDER BY avg_rating DESC) AS rank
    FROM
        AverageRatings
)
SELECT
    activity_name,
    avg_rating
FROM
    RankedActivities
WHERE
    rank <=2;
```

Day 19 of SQL Advent Calendar

Today's Question:

Scientists are studying the diets of polar bears. Write a query to find the maximum amount of food (in kilograms) consumed by each polar bear in a single meal December 2024. Include the bear_name and biggest_meal_kg, and sort the results in descending order of largest meal consumed.

Table name: polar_bears

bear_id	bear_name	age
1	Snowball	10
2	Frosty	7
3	Iceberg	15

Table name: meal_log

log_id	bear_id	food_type	food_weight_kg	date
1	1	Seal	30	2024-12-01
2	2	Fish	15	2024-12-02
3	1	Fish	10	2024-12-03
4	3	Seal	25	2024-12-04
5	2	Seal	20	2024-12-05

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Write your SQL query here ⓘ

```
1  SELECT
2  |   pb.bear_name,
3  |   MAX(ml.food_weight_kg) AS biggest_meal_kg
4  | FROM
5  |   polar_bears pb
6  | JOIN
7  |   meal_log ml ON pb.bear_id = ml.bear_id
8  | WHERE
9  |   ml.date BETWEEN '2024-12-01' AND '2024-12-31'
10 | GROUP BY
11 |   pb.bear_id, pb.bear_name
12 | ORDER BY
```

Is your query correct?

[Submit Answer](#)

BEAR_NAME	BIGGEST_MEAL_KG
Snowball	30
Iceberg	25
Frosty	20

Correct!! 🎉 Great work!

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SELECT

```
pb.bear_name,
MAX(ml.food_weight_kg) AS biggest_meal_kg
```

FROM

```
polar_bears pb
```

JOIN

```
meal_log ml ON pb.bear_id = ml.bear_id
```

WHERE

```
ml.date BETWEEN '2024-12-01' AND '2024-12-31'
```

GROUP BY

```
pb.bear_id, pb.bear_name
```

ORDER BY

```
biggest_meal_kg DESC;
```



Day 20 of SQL Advent Calendar

Today's Question:

We are looking for cheap gifts at the market. Which vendors are selling items priced below \$10? List the unique (i.e. remove duplicates) vendor names.

Table name: vendors

vendor_id	vendor_name	market_location
1	Cozy Crafts	Downtown Square
2	Sweet Treats	Central Park
3	Winter Warmers	Downtown Square

Table name: item_prices

item_id	vendor_id	item_name	price_usd
1	1	Knitted Scarf	25
2	2	Hot Chocolate	5
3	2	Gingerbread Cookie	3.5
4	3	Wool Hat	18
5	3	Santa Pin	2

Question level of difficulty: Easy   

Write your SQL query here ⓘ

```
1 | SELECT
2 |   DISTINCT(v.vendor_name)
3 | FROM
4 |   vendors v
5 | JOIN
6 |   item_prices i
7 | ON
8 |   v.vendor_id = i.vendor_id
9 | WHERE
10 |   i.price_usd < 10
11 | GROUP BY
12 |   v.vendor_name;
```

Is your query correct?

Submit Answer**VENDOR_NAME**

Sweet Treats

Winter Warmers

Correct! 🎉 Great work!

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```
SELECT
    DISTINCT(v.vendor_name)
FROM
    vendors v
JOIN
    item_prices i
ON
    v.vendor_id = i.vendor_id
WHERE
    i.price_usd < 10
GROUP BY
    v.vendor_name;
```

Day 21 of SQL Advent Calendar

Today's Question:

Santa needs to optimize his sleigh for Christmas deliveries. Write a query to calculate the total weight of gifts for each recipient type (good or naughty) and determine what percentage of the total weight is allocated to each type. Include the recipient_type, total_weight, and weight_percentage in the result.

Table name: gifts

gift_id	gift_name	recipient_type	weight_kg
1	Toy Train	good	2.5
2	Lumps of Coal	naughty	1.5
3	Teddy Bear	good	1.2
4	Chocolate Bar	good	0.3
5	Board Game	naughty	1.8

Question level of difficulty: Hard 

Write your SQL query here 

```
1 WITH TotalWeight AS (
2     SELECT
3         SUM(weight_kg) AS total_weight_all
4     FROM
5         gifts
6 ),
7 RecipientWeight AS (
8     SELECT
9         recipient_type,
10        SUM(weight_kg) AS total_weight
11    FROM
12        gifts
13    GROUP BY
14        recipient_type
15 )
16 SELECT
17     rw.recipient_type,
18     rw.total_weight,
19     ROUND((rw.total_weight / tw.total_weight_all) * 100, 2) AS
20     weight_percentage
21 FROM
```

Is your query correct? 

[Submit Answer](#)

RECIPIENT_TYPE	TOTAL_WEIGHT	WEIGHT_PERCENTAGE
good	4	54.79
naughty	3.3	45.21

Correct!!  Great work!

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```
WITH TotalWeight AS (
    SELECT
        SUM(weight_kg) AS total_weight_all
    FROM
        gifts
),
RecipientWeight AS (
    SELECT
        recipient_type,
        SUM(weight_kg) AS total_weight
    FROM
        gifts
    GROUP BY
        recipient_type
)
SELECT
    rw.recipient_type,
    rw.total_weight,
    ROUND((rw.total_weight / tw.total_weight_all) * 100, 2) AS
    weight_percentage
FROM
```

```

RecipientWeight rw
CROSS JOIN
    TotalWeight tw
ORDER BY
    weight_percentage DESC;

```

Day 22 of SQL Advent Calendar

Today's Question:

We are hosting a gift party and need to ensure every guest receives a gift. Using the guests and guest_gifts tables, write a query to identify the guest(s) who have not been assigned a gift (i.e. they are not listed in the guest_gifts table).

Table name: guests

guest_id	guest_name
1	Cindy Lou
2	The Grinch
3	Max the Dog
4	Mayor May Who

Table name: guest_gifts

gift_id	guest_id	gift_name
1	1	Toy Train
2	1	Plush Bear
3	2	Bag of Coal
4	2	Sleigh Bell
5	3	Dog Treats

Question level of difficulty: Medium   

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Write your SQL query here ⓘ

```

1  SELECT
2      g.guest_id,
3      g.guest_name
4  FROM
5      guests g
6  LEFT JOIN
7      guest_gifts gg ON g.guest_id = gg.guest_id
8  WHERE
9      gg.guest_id IS NULL;
10

```

Is your query correct?

[Submit Answer](#)

GUEST_ID	GUEST_NAME
4	Mayor May Who

Correct! 🎉 Great work!

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SELECT

```

g.guest_id,
g.guest_name
FROM
    guests g
LEFT JOIN
    guest_gifts gg ON g.guest_id = gg.guest_id
WHERE
    gg.guest_id IS NULL;

```

Day 23 of SQL Advent Calendar

Today's Question:

The Grinch tracked his weight every day in December to analyze how it changed daily. Write a query to return the weight change (in pounds) for each day, calculated as the difference from the previous day's weight.

Table name: grinch_weight_log

log_id	day_of_month	weight
1	1	250
2	2	248
3	3	249
4	4	247
5	5	246
6	6	248

Question level of difficulty: Medium   

Write your SQL query here ⓘ

```
1 SELECT
2     day_of_month,
3     weight,
4     weight - LAG(weight) OVER (ORDER BY day_of_month) AS weight_change
5 FROM
6     grinch_weight_log;
7
```

Is your query correct?

[Submit Answer](#)

3	249	1
4	247	-2
5	246	-1
6	248	2

Correct! 🎉 Great work!

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SELECT

```
    day_of_month,
    weight,
    weight - LAG(weight) OVER (ORDER BY day_of_month) AS
weight_change
FROM
    grinch_weight_log;
```

Day 24 of SQL Advent Calendar

Today's Question:

Santa is tracking how many presents he delivers each night leading up to Christmas. He wants a running total to see how many gifts have been delivered so far on any given night. Using the deliveries table, calculate the cumulative sum of gifts delivered, ordered by the delivery date.

Table name: deliveries

delivery_date	gifts_delivered
2024-12-20	120
2024-12-21	150
2024-12-22	200
2024-12-23	300
2024-12-24	500

Question level of difficulty: Hard   

Write your SQL query here ⓘ

```
1 SELECT
2     delivery_date,
3     gifts_delivered,
4     SUM(gifts_delivered) OVER (ORDER BY delivery_date) AS cumulative_sum
5 FROM
6     deliveries;
```

Is your query correct?

[Submit Answer](#)

2024-12-20	120	120
2024-12-21	150	270
2024-12-22	200	470
2024-12-23	300	770
2024-12-24	500	1270

Correct! 🎉 Great work!

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```
SELECT
    delivery_date,
    gifts_delivered,
    SUM(gifts_delivered) OVER (ORDER BY delivery_date) AS
cumulative_gifts
FROM
    deliveries;
```