100 SQL **PROBLEMS** in Tanglish

Practical Use Cases from Uber, Zomato, Amazon & More

Uber zomato

amazon

Gowtham SB

Problem 1: Uber – Identify Consistent Riders in Chennai

Question (Tanglish)

Gowtham wants to find Uber customers (like Mani, Ravi) who completed at least 50 rides in Chennai over the last 3 months without any cancellations.

Problem Statement (Tanglish)

Uber-ku customer loyalty track panna, yaar consistent-ah Chennai city-la ride edukkaanga, andha customers find pannanum. Condition: last 3 months-la at least 50 rides complete panni irukkanum, and cancellation irukka koodaadhu.

Create & Insert DDL (MySQL)

CREATE TABLE uber rides (

```
ride_id INT PRIMARY KEY,
  customer id INT,
  customer name VARCHAR(50),
  city VARCHAR(50),
  ride date DATE,
  cancelled BOOLEAN
);
INSERT INTO uber rides VALUES
(1, 201, 'Mani', 'Chennai', '2025-04-01', FALSE),
(2, 201, 'Mani', 'Chennai', '2025-04-02', FALSE),
-- (add 48 more rows for Mani)
(51, 202, 'Ravi', 'Chennai', '2025-04-01', FALSE),
(52, 202, 'Ravi', 'Chennai', '2025-04-02', TRUE),
-- (add additional data for variety)
(100, 203, 'Arun', 'Coimbatore', '2025-04-01', FALSE);
```

Solution (MySQL)

```
SELECT customer id, customer name, COUNT(*) AS total rides
FROM uber rides
WHERE city = 'Chennai' AND cancelled = FALSE
AND ride date >= DATE SUB(CURDATE(), INTERVAL 3 MONTH)
GROUP BY customer id, customer name
HAVING COUNT(*) >= 50;
```

Explanation (Tanglish)

Step-by-Step: 1 WHERE city = 'Chennai' - Chennai rides maathiri filter pannrom 2 cancelled = FALSE - Cancelled rides exclude pannrom. 3 ride_date >= DATE_SUB(CURDATE(), INTERVAL 3 MONTH) - Last 3 months data maathiri filter. 4 GROUP BY customer_id, customer_name - Customer-wise group pannrom. 5 HAVING COUNT(*) >= 50 - At least 50 completed rides irukka nu check pannrom.

Eg:

- Ravi had 50 rides but 1 cancellation X will not be shown.

🚖 Use Case Value (Tanglish)

Uber and Gowtham can use this query to identify **consistent riders** for rewards, loyalty programs, and churn prevention for **premium Chennai customers**.

Problem 2: Zomato – Identify Friday Frequent Customers

Question (Tanglish)

Gowtham wants to find Zomato customers (like Karthik, Suresh) who placed orders on every Friday for the last 3 months continuously.

Problem Statement (Tanglish)

Zomato-la customers Friday special offers-ku consistent-ah order panraangala-nu check pannanum. Condition: last 3 months-la, every Friday atleast 1 order panni irukkanum.

Create & Insert DDL (MySQL)

CREATE TABLE zomato_orders (
order_id INT PRIMARY KEY,
customer_id INT,
customer_name VARCHAR(50),
order_date DATE,
amount DECIMAL(10,2)

```
);
INSERT INTO zomato orders VALUES
(1, 301, 'Karthik', '2025-04-04', 350.00),
(2, 301, 'Karthik', '2025-04-11', 420.00),
(3, 301, 'Karthik', '2025-04-18', 250.00),
(4, 301, 'Karthik', '2025-04-25', 500.00),
-- (add Fridays for May and June for Karthik)
(20, 302, 'Suresh', '2025-04-04', 300.00),
(21, 302, 'Suresh', '2025-04-18', 450.00),
-- (incomplete Fridays for Suresh)
(40, 303, 'Divya', '2025-04-05', 600.00);
Solution (MySQL)
WITH fridays AS (
  SELECT DISTINCT DATE(order date) AS order date
  FROM zomato_orders
  WHERE DAYOFWEEK(order date) = 6
   AND order date >= DATE SUB(CURDATE(), INTERVAL 3 MONTH)
),
customer_fridays AS (
  SELECT customer id, customer name, COUNT(DISTINCT DATE(order date)) AS
friday_orders
  FROM zomato orders
  WHERE DAYOFWEEK(order_date) = 6
   AND order date >= DATE SUB(CURDATE(), INTERVAL 3 MONTH)
  GROUP BY customer id, customer name
),
total fridays AS (
  SELECT COUNT(*) AS total fridays FROM fridays
SELECT c.customer id, c.customer name
FROM customer fridays c, total fridays t
WHERE c.friday orders = t.total fridays;
```

Explanation (Tanglish)

✓ Step-by-Step:

1 fridays CTE – Last 3 months-la Friday dates collect pannrom.

2customer_fridays CTE - Each customer ethana Fridays orders pannanga-nu count

pannrom.

3 total_fridays CTE - Total Fridays count pannrom (for comparison).

4 Final SELECT-la, c.friday_orders = t.total_fridays vechutu, customers every Friday order pannirukka nu filter pannrom.

Eg:

- Karthik every Friday order pannirukkiraar will be shown.
- Suresh some Fridays skip pannirukkiraar X will not be shown.

Use Case Value (Tanglish)

Zomato and Gowtham can use this to identify **Friday consistent customers** for special offers, loyalty rewards, and targeted marketing during **weekend peak orders**.

Problem 3: Amazon – Top Repeat Purchasers

Question (Tanglish)

Gowtham wants to find Amazon customers (like Priya, Arjun) who purchased the same product at least 5 times in the last 3 months.

Problem Statement (Tanglish)

Amazon-la customers ore product 5 times illa adhu vida adhigama vaangirukkaangala-nu identify panna vendiyathu for last 3 months.

X Create & Insert DDL (MySQL)

```
CREATE TABLE amazon_orders (
    order_id INT PRIMARY KEY,
    customer_id INT,
    customer_name VARCHAR(50),
    product_id INT,
    product_name VARCHAR(50),
    order_date DATE
);
```

INSERT INTO amazon_orders VALUES

```
(1, 401, 'Priya', 1001, 'Bluetooth Speaker', '2025-04-02'), (2, 401, 'Priya', 1001, 'Bluetooth Speaker', '2025-04-10'), (3, 401, 'Priya', 1001, 'Bluetooth Speaker', '2025-04-20'), (4, 401, 'Priya', 1001, 'Bluetooth Speaker', '2025-05-01'), (5, 401, 'Priya', 1001, 'Bluetooth Speaker', '2025-05-15'), (6, 402, 'Arjun', 1002, 'Wireless Mouse', '2025-04-05'), (7, 402, 'Arjun', 1002, 'Wireless Mouse', '2025-06-01');
```

Solution (MySQL)

SELECT customer_id, customer_name, product_id, product_name, COUNT(*) AS purchase_count FROM amazon_orders WHERE order_date >= DATE_SUB(CURDATE(), INTERVAL 3 MONTH) GROUP BY customer_id, customer_name, product_id, product_name HAVING purchase_count >= 5;

Explanation (Tanglish)

✓ Step-by-Step:

MHERE order_date >= DATE_SUB(CURDATE(), INTERVAL 3 MONTH) vechutu last 3
months data filter pannrom.

②GROUP BY customer_id, customer_name, product_id, product_name vechutu group panna rom.

3HAVING purchase_count >= 5 vechutu same product 5 times illa adhigama vaangina customers filter pannrom.

Eg:

- Priya Bluetooth Speaker 5 times vaangirukkanga will be shown.
- Arjun Wireless Mouse only 2 times vaangirukkanga X will not be shown.

Use Case Value (Tanglish)

Amazon and Gowtham can use this to identify **repeat product purchasers** to give personalized offers, product bundles, or membership rewards for improving customer loyalty.

Problem 4: Netflix - Identify Binge Watchers

Question (Tanglish)

Gowtham wants to find Netflix users (like Saravanan, Divya) who watched at least 5 different movies per week for 4 consecutive weeks.

Problem Statement (Tanglish)

Netflix-la binge watchers identify panna vendiyathu, last 4 weeks continuous-ah, weekly 5 different movies watch pannirukkangala-nu check panna.

X Create & Insert DDL (MySQL)

```
CREATE TABLE netflix_watch_history (
  watch id INT PRIMARY KEY,
  user id INT,
  user_name VARCHAR(50),
  movie id INT,
  movie name VARCHAR(100),
  watch date DATE
);
INSERT INTO netflix watch history VALUES
(1, 501, 'Saravanan', 2001, 'Movie A', '2025-06-02'),
(2, 501, 'Saravanan', 2002, 'Movie B', '2025-06-03'),
(3, 501, 'Saravanan', 2003, 'Movie C', '2025-06-04'),
(4, 501, 'Saravanan', 2004, 'Movie D', '2025-06-05'),
(5, 501, 'Saravanan', 2005, 'Movie E', '2025-06-06'),
(6, 502, 'Divya', 2001, 'Movie A', '2025-06-02'),
(7, 502, 'Divya', 2002, 'Movie B', '2025-06-02');
```

Solution (MySQL)

```
WITH week_data AS (
    SELECT
    user_id,
    user_name,
    WEEK(watch_date) AS watch_week,
    COUNT(DISTINCT movie_id) AS movie_count
FROM netflix_watch_history
WHERE watch_date >= DATE_SUB(CURDATE(), INTERVAL 4 WEEK)
GROUP BY user_id, user_name, WEEK(watch_date)
)
SELECT user_id, user_name
```

FROM week_data
WHERE movie_count >= 5
GROUP BY user_id, user_name
HAVING COUNT(*) = 4;

🏿 Explanation (Tanglish)

Step-by-Step:

- MEEK(watch_date) use panni weekly partition pannrom.
- 2 Last 4 weeks data maathiri filter pannrom.
- 3 Each week 5 different movies watch pannangala-nu movie_count >= 5 vechutu filter pannrom.
- 4 HAVING COUNT(*) = 4 vechutu 4 consecutive weeks satisfy pannra users identify pannrom.

Eg:

- Saravanan 5 movies per week for 4 weeks watch pannirundhaal

 ✓ will be shown.
- Divya only 2 movies watch pannirukkanga X will not be shown.

Use Case Value (Tanglish)

Netflix and Gowtham can use this to identify **heavy binge watchers** for premium upsell, early access promotions, and loyalty rewards.

Problem 5: Swiggy – Identify Frequent Order Cancellers

Question (Tanglish)

Gowtham wants to find Swiggy customers (like Meena, Ravi) who cancelled orders more than 3 times in any single month.

Problem Statement (Tanglish)

Swiggy-ku frequent cancellers identify panna vendiyathu. Last 6 months-la yaarum oru month-ku mela 3 orders cancel pannirukkangala-nu check panna.

Create & Insert DDL (MySQL)

```
CREATE TABLE swiggy_orders (
    order_id INT PRIMARY KEY,
    customer_id INT,
    customer_name VARCHAR(50),
    order_date DATE,
    cancelled BOOLEAN
);

INSERT INTO swiggy_orders VALUES
(1, 601, 'Meena', '2025-03-02', TRUE),
(2, 601, 'Meena', '2025-03-10', TRUE),
(3, 601, 'Meena', '2025-03-10', TRUE),
(4, 601, 'Meena', '2025-03-15', TRUE),
(5, 602, 'Ravi', '2025-04-03', TRUE),
(6, 602, 'Ravi', '2025-04-10', FALSE),
(7, 602, 'Ravi', '2025-04-18', TRUE);
```

Solution (MySQL)

SELECT customer_id, customer_name, DATE_FORMAT(order_date, '%Y-%m') AS cancel_month, COUNT(*) AS cancel_count FROM swiggy_orders
WHERE cancelled = TRUE
GROUP BY customer_id, customer_name, DATE_FORMAT(order_date, '%Y-%m') HAVING cancel_count > 3;

Explanation (Tanglish)

✓ Step-by-Step:

WHERE cancelled = TRUE vechutu cancelled orders mattum filter pannrom.

2DATE_FORMAT(order_date, '%Y-%m') vechutu month-wise group panna ready pannrom.

GROUP BY customer_id, customer_name, month panna rom.

4 HAVING cancel_count > 3 vechutu andha month-la 3 mela cancel pannina customers identify pannrom.

Eg:

- Meena March month-la 4 orders cancel pannirukkanga will be shown.
- Ravi maximum 2 cancel pannirukkanga X will not be shown.

Use Case Value (Tanglish)

Swiggy and Gowtham can use this to identify **frequent cancellers** and take corrective actions like order confirmation calls or delivery prioritisation for improving operational efficiency.

Problem 6: Meta – Consistent Post Engagement

※ Question (Tanglish)

Gowtham wants to find Meta users (like Kavin, Divya) who liked at least 50 posts each month consistently for the last 4 months.

Problem Statement (Tanglish)

Meta-la yaar consistent-ah monthly 50 post-ku mela like pannraangalo, last 4 months continuous-ah, andha users identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE meta_likes (
    like_id INT PRIMARY KEY,
    user_id INT,
    user_name VARCHAR(50),
    post_id INT,
    like_date DATE
);

INSERT INTO meta_likes VALUES
(1, 701, 'Kavin', 9001, '2025-03-05'),
(2, 701, 'Kavin', 9002, '2025-03-06'),
-- (add 48 more likes in March for Kavin)
(51, 701, 'Kavin', 9051, '2025-04-02'),
-- (add 50 likes in April, May, June for Kavin)
(200, 702, 'Divya', 9101, '2025-03-10'),
(201, 702, 'Divya', 9102, '2025-03-12');
```

Solution (MySQL)

```
WITH monthly_likes AS (
  SELECT user_id, user_name, DATE_FORMAT(like_date, '%Y-%m') AS like_month,
COUNT(*) AS like_count
  FROM meta likes
  WHERE like date >= DATE SUB(CURDATE(), INTERVAL 4 MONTH)
  GROUP BY user_id, user_name, DATE_FORMAT(like_date, '%Y-%m')
SELECT user id, user name
FROM monthly likes
WHERE like count >= 50
GROUP BY user id, user name
HAVING COUNT(*) = 4;
```

Explanation (Tanglish)

✓ Step-by-Step:

1)WHERE like_date >= DATE_SUB(CURDATE(), INTERVAL 4 MONTH) vechutu last 4 months data filter pannrom.

- 2DATE_FORMAT(like_date, '%Y-%m') vechutu month-wise group pannrom.
- 3 COUNT(*) AS like_count to count likes per month.
- 4 WHERE like_count >= 50 filter panni 50 likes cross pannina months maathiri retain pannrom.
- 5 HAVING COUNT(*) = 4 vechutu 4 months continuous satisfy pannra users identify pannrom.

Eg:

- Kavin 50+ likes for 4 months continuously pannirukkanga W will be shown.
- Divya only few likes pannirukkanga X will not be shown.

Use Case Value (Tanglish)

Meta and Gowtham can use this to identify highly engaged users for reel boosts, exclusive badges, and personalized engagement campaigns.



🚖 Problem 7: Uber – Identify Early Morning Riders

Question (Tanglish)

Gowtham wants to find Uber customers (like Prabhu, Siva) who took rides between 6-9 AM continuously for 30 days.

Problem Statement (Tanglish)

Uber-la 6-9 AM la daily ride edukka consistent customers identify panna vendiyathu for 30 consecutive days.

X Create & Insert DDL (MySQL)

```
CREATE TABLE uber_rides_morning (
ride_id INT PRIMARY KEY,
customer_id INT,
customer_name VARCHAR(50),
ride_date DATE,
ride_time TIME
);

INSERT INTO uber_rides_morning VALUES
(1, 801, 'Prabhu', '2025-06-01', '06:30:00'),
(2, 801, 'Prabhu', '2025-06-02', '07:15:00'),
-- (add 28 more for Prabhu)
(31, 802, 'Siva', '2025-06-01', '08:45:00');
```

Solution (MySQL)

```
WITH morning_rides AS (
    SELECT customer_id, customer_name, ride_date
    FROM uber_rides_morning
    WHERE HOUR(ride_time) BETWEEN 6 AND 8
    GROUP BY customer_id, customer_name, ride_date
),
ride_counts AS (
    SELECT customer_id, customer_name, COUNT(*) AS ride_days
    FROM morning_rides
    GROUP BY customer_id, customer_name
)
SELECT customer_id, customer_name
FROM ride_counts
WHERE ride_days = 30;
```

Explanation (Tanglish)

Step-by-Step:

1 HOUR(ride_time) BETWEEN 6 AND 8 vechutu 6-9 AM rides filter pannrom.

GROUP BY customer_id, customer_name, ride_date vechutu unique days capture
pannrom.

3 COUNT(*) AS ride_days panna total days count pannrom.

4 WHERE ride_days = 30 vechutu 30 consecutive days la ride edukka consistent customers identify pannrom.

Eg:

- Prabhu 30 days la continuous ride pannirukkanga will be shown.
- Siva single day pannirukkanga X will not be shown.

🚖 Use Case Value (Tanglish)

Uber and Gowtham can use this to identify **consistent early morning commuters** for special pass offers and premium user tagging.

Problem 8: Swiggy – Identify Late Night Foodies

Question (Tanglish)

Gowtham wants to find Swiggy customers (like Aravind, Selvi) who ordered food after 11 PM for 10 consecutive days.

Problem Statement (Tanglish)

Swiggy-la late night la 11 PM ku mela order pannra customers identify panna vendiyathu for 10 days continuous.

Create & Insert DDL (MySQL)

CREATE TABLE swiggy_late_orders (
order_id INT PRIMARY KEY,
customer_id INT,
customer_name VARCHAR(50),

```
order_date DATE,
  order time TIME
);
INSERT INTO swiggy late orders VALUES
(1, 901, 'Aravind', '2025-06-01', '23:15:00'),
(2, 901, 'Aravind', '2025-06-02', '23:45:00'),
-- (add 8 more for Aravind)
(11, 902, 'Selvi', '2025-06-01', '22:55:00');
Solution (MySQL)
WITH late orders AS (
  SELECT customer id, customer name, order date
  FROM swiggy late orders
  WHERE HOUR(order_time) >= 23
  GROUP BY customer id, customer name, order date
),
order counts AS (
  SELECT customer id, customer name, COUNT(*) AS late days
  FROM late orders
  GROUP BY customer id, customer name
)
SELECT customer_id, customer_name
FROM order counts
WHERE late days = 10;
```

Explanation (Tanglish)

✓ Step-by-Step:

- 1 HOUR(order_time) >= 23 vechutu 11 PM ku mela orders filter pannrom.
- **2**GROUP BY customer_id, customer_name, order_date panna daily uniqueness maintain pannrom.
- 3 COUNT(*) AS late_days panna romba late order days count pannrom.
- 4 WHERE late_days = 10 vechutu 10 continuous late night order pannra customers identify pannrom.

Eg:

• Aravind 10 days continuous late night orders pannirukkanga 🗸 will be shown.

• Selvi 10 days continuous la illa X will not be shown.

Use Case Value (Tanglish)

Swiggy and Gowtham can use this to identify **late night foodies** for exclusive night meal offers and targeted delivery promotions.

Problem 9: Amazon - High Spend Customers

Question (Tanglish)

Gowtham wants to find Amazon customers (like Lakshmi, Kiran) who spent more than ₹1 Lakh in the last year.

Problem Statement (Tanglish)

Amazon-la last 1 year-la 1 Lakh mela spend pannina customers identify panna vendiyathu for premium customer tagging.

Create & Insert DDL (MySQL)

```
CREATE TABLE amazon_orders_high_spend (
    order_id INT PRIMARY KEY,
    customer_id INT,
    customer_name VARCHAR(50),
    order_amount DECIMAL(10,2),
    order_date DATE
);
INSERT INTO amazon_orders_high_spend VALUES
(1, 1001, 'Lakshmi', 25000.00, '2024-08-01'),
```

- (2, 1001, 'Lakshmi', 30000.00, '2024-10-12'), (3, 1001, 'Lakshmi', 50000.00, '2025-03-05'),
- (4, 1002, 'Kiran', 20000.00, '2024-09-15');

Solution (MySQL)

SELECT customer_id, customer_name, SUM(order_amount) AS total_spent FROM amazon_orders_high_spend WHERE order_date >= DATE_SUB(CURDATE(), INTERVAL 1 YEAR) GROUP BY customer_id, customer_name HAVING total spent > 100000;

Explanation (Tanglish)

✓ Step-by-Step:

1WHERE order_date >= DATE_SUB(CURDATE(), INTERVAL 1 YEAR) vechutu last 1
year orders filter pannrom.

2SUM(order_amount) panna total spent calculate pannrom.

3 HAVING total_spent > 100000 vechutu 1 Lakh mela spend pannina customers identify pannrom.

Eg:

- Lakshmi ₹1.05L spend pannirukkanga will be shown.
- Kiran ₹20K mattum spend pannirukkanga X will not be shown.

Use Case Value (Tanglish)

Amazon and Gowtham can use this to identify **high-value customers** for premium membership, early delivery benefits, and personalized campaigns.

Problem 10: Netflix – Tamil Content Watchers



Gowtham wants to find Netflix users (like Harish, Kavya) who watched only Tamil content for 6 months continuously.

Problem Statement (Tanglish)

Netflix-la yaar 6 months continuous-ah Tamil content mattum watch pannirukkangalo, andha users identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE netflix_tamil_watch (
    watch_id INT PRIMARY KEY,
    user_id INT,
    user_name VARCHAR(50),
    content_language VARCHAR(20),
    watch_date DATE
);

INSERT INTO netflix_tamil_watch VALUES
(1, 1101, 'Harish', 'Tamil', '2025-01-10'),
(2, 1101, 'Harish', 'Tamil', '2025-02-12'),
(3, 1101, 'Harish', 'Tamil', '2025-03-05'),
(4, 1101, 'Harish', 'Tamil', '2025-04-15'),
(5, 1101, 'Harish', 'Tamil', '2025-06-02'),
(6, 1101, 'Harish', 'Tamil', '2025-06-02'),
(7, 1102, 'Kavya', 'English', '2025-03-12');
```

Solution (MySQL)

```
WITH monthly_tamil AS (
    SELECT user_id, user_name, DATE_FORMAT(watch_date, '%Y-%m') AS watch_month,

COUNT(*) AS tamil_count
    FROM netflix_tamil_watch
    WHERE content_language = 'Tamil'
    GROUP BY user_id, user_name, watch_month
),

month_counts AS (
    SELECT user_id, user_name, COUNT(DISTINCT watch_month) AS months_watched
    FROM monthly_tamil
    GROUP BY user_id, user_name
)

SELECT user_id, user_name
FROM month_counts
```

WHERE months_watched = 6;

Explanation (Tanglish)

✓ Step-by-Step:

- WHERE content_language = 'Tamil' vechutu Tamil content mattum filter pannrom.
- DATE_FORMAT(watch_date, '%Y-%m') vechutu month-wise track pannrom.
- 3 COUNT(DISTINCT watch_month) panna how many months Tamil content watch pannangannu count pannrom.
- 4 WHERE months_watched = 6 vechutu 6 months continuous watch pannina users identify pannrom.

Eg:

- Harish 6 months Tamil content watch pannirukkanga will be shown.
- Kavya English content watch pannirukkanga X will not be shown.

Use Case Value (Tanglish)

Netflix and Gowtham can use this to identify **Tamil loyal viewers** for regional content campaigns and personalized recommendations.

🍔 Problem 11: Zomato – Festival Orders Tracker

Question (Tanglish)

Gowtham wants to find Zomato customers (like Nisha, Rajesh) who ordered sweets during all major festivals in the last year.

Problem Statement (Tanglish)

Zomato-la last 1 year festivals-la sweets order pannina consistent customers identify panna vendiyathu.

CREATE TABLE zomato_festival_orders (order_id INT PRIMARY KEY, customer_id INT,

```
customer_name VARCHAR(50),
  item_category VARCHAR(20),
  order date DATE
);
INSERT INTO zomato festival orders VALUES
(1, 1201, 'Nisha', 'Sweet', '2024-10-24'),
(2, 1201, 'Nisha', 'Sweet', '2025-01-14'),
(3, 1201, 'Nisha', 'Sweet', '2025-03-29'),
(4, 1202, 'Rajesh', 'Sweet', '2024-10-24'),
(5, 1202, 'Rajesh', 'Biryani', '2025-01-14');
💡 Solution (MySQL)
WITH festival orders AS (
  SELECT customer_id, customer_name, COUNT(DISTINCT order_date) AS festival_days
  FROM zomato festival orders
  WHERE item_category = 'Sweet'
  GROUP BY customer id, customer name
```

関 Explanation (Tanglish)

FROM festival orders WHERE festival days >= 3;

SELECT customer_id, customer_name

Sweet orders mattum filter panni, festival dates la count panni, 3 festivals la sweets order pannina customers identify pannrom.

Eg: Nisha 3 festivals la order pannirukkanga [7], Rajesh only 1 festival mattum pannirukkanga Χ.

Use Case Value (Tanglish)

Zomato and Gowtham can use this to identify festival-order customers for special campaign offers.



🚖 Problem 12: Uber – Multi-City Riders

Question (Tanglish)

Gowtham wants to find Uber customers (like Vignesh, Sneha) who took rides in more than 3 different cities in the last 6 months.

Problem Statement (Tanglish)

Uber-la last 6 months la 3 city mela rides edukka consistent customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE uber_multi_city (
ride_id INT PRIMARY KEY,
customer_id INT,
customer_name VARCHAR(50),
city VARCHAR(50),
ride_date DATE
);

INSERT INTO uber_multi_city VALUES
(1, 1301, 'Vignesh', 'Chennai', '2025-02-10'),
(2, 1301, 'Vignesh', 'Bangalore', '2025-03-15'),
(3, 1301, 'Vignesh', 'Coimbatore', '2025-04-20'),
(4, 1301, 'Vignesh', 'Hyderabad', '2025-05-25'),
(5, 1302, 'Sneha', 'Chennai', '2025-03-10');
```

Solution (MySQL)

```
SELECT customer_id, customer_name, COUNT(DISTINCT city) AS cities_visited FROM uber_multi_city
WHERE ride_date >= DATE_SUB(CURDATE(), INTERVAL 6 MONTH)
GROUP BY customer_id, customer_name
HAVING cities_visited > 3;
```

Explanation (Tanglish)

Last 6 months rides filter panni, different cities count panni, 3 mela city la ride edukka customers identify pannrom.

Eg: Vignesh 4 city la ride pannirukkanga ✓, Sneha 1 city mattum pannirukkanga X.

Use Case Value (Tanglish)

Uber and Gowtham can use this to identify multi-city frequent travellers for premium offers.



Problem 13: Amazon – Coupon Usage Tracker



🗩 Question (Tanglish)

Gowtham wants to find Amazon customers (like Anitha, Manoj) who used discount coupons in all their purchases in the last 3 months.

Problem Statement (Tanglish)

Amazon-la last 3 months la every order-ku coupon use pannina customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE amazon_coupon_usage (
  order id INT PRIMARY KEY,
  customer_id INT,
  customer name VARCHAR(50),
  coupon used BOOLEAN,
  order_date DATE
);
INSERT INTO amazon coupon usage VALUES
(1, 1401, 'Anitha', TRUE, '2025-04-02'),
(2, 1401, 'Anitha', TRUE, '2025-05-10'),
(3, 1401, 'Anitha', TRUE, '2025-06-12'),
(4, 1402, 'Manoj', TRUE, '2025-04-15'),
(5, 1402, 'Manoj', FALSE, '2025-05-20');
```

💡 Solution (MySQL)

```
WITH total_orders AS (
  SELECT customer id, customer name, COUNT(*) AS total orders
  FROM amazon_coupon_usage
  WHERE order date >= DATE SUB(CURDATE(), INTERVAL 3 MONTH)
  GROUP BY customer id, customer name
```

```
),
coupon_orders AS (
    SELECT customer_id, customer_name, COUNT(*) AS coupon_orders
    FROM amazon_coupon_usage
    WHERE coupon_used = TRUE AND order_date >= DATE_SUB(CURDATE(), INTERVAL 3
MONTH)
    GROUP BY customer_id, customer_name
)
SELECT t.customer_id, t.customer_name
FROM total_orders t
JOIN coupon_orders c ON t.customer_id = c.customer_id
WHERE t.total_orders = c.coupon_orders;
```

Explanation (Tanglish)

Last 3 months la orders filter panni, total orders count pannrom, coupon used orders count pannrom, both equal na customers identify pannrom.

Eg: Anitha all orders ku coupon use pannirukkanga , Manoj oru order la coupon use pannala .

Use Case Value (Tanglish)

Amazon and Gowtham can use this to identify **coupon dependent customers** for exclusive discount campaigns and retention offers.

Problem 14: Zomato – Weekly Consistent Order Customers

Question (Tanglish)

Gowtham wants to find Zomato customers (like Santhosh, Keerthi) who ordered at least once every week for the last 8 weeks.

Problem Statement (Tanglish)

Zomato-la last 8 weeks la weekly atleast 1 order pannina customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE zomato_weekly_orders (
  order id INT PRIMARY KEY,
  customer id INT,
  customer name VARCHAR(50),
  order date DATE
);
INSERT INTO zomato weekly orders VALUES
(1, 1501, 'Santhosh', '2025-05-01'),
(2, 1501, 'Santhosh', '2025-05-08'),
(3, 1501, 'Santhosh', '2025-05-15'),
(4, 1501, 'Santhosh', '2025-05-22'),
(5, 1501, 'Santhosh', '2025-05-29'),
(6, 1501, 'Santhosh', '2025-06-05'),
(7, 1501, 'Santhosh', '2025-06-12'),
(8, 1501, 'Santhosh', '2025-06-19'),
(9, 1502, 'Keerthi', '2025-05-01');
```

Solution (MySQL)

```
WITH weekly_orders AS (
    SELECT customer_id, customer_name, YEARWEEK(order_date) AS year_week
    FROM zomato_weekly_orders
    WHERE order_date >= DATE_SUB(CURDATE(), INTERVAL 8 WEEK)
    GROUP BY customer_id, customer_name, year_week
)

SELECT customer_id, customer_name
FROM weekly_orders
GROUP BY customer_id, customer_name
HAVING COUNT(DISTINCT year_week) = 8;
```

Explanation (Tanglish)

Last 8 weeks data filter panni, weekly atleast 1 order panna customers identify panna YEARWEEK use pannrom. 8 unique weeks irundhaa show pannrom.

Eg: Santhosh 8 weeks la order pannirukkanga V, Keerthi 1 week mattum pannirukkanga X.



Zomato and Gowtham can use this to identify **weekly loyal customers** for exclusive delivery benefits and rewards.

Problem 15: Uber – Cash Payment Consistency

Question (Tanglish)

Gowtham wants to find Uber customers (like Muthu, Priya) who paid cash for all rides in the last 3 months.

Problem Statement (Tanglish)

Uber-la last 3 months la ella rides-um cash la pay pannina customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE uber_cash_payments (
ride_id INT PRIMARY KEY,
customer_id INT,
customer_name VARCHAR(50),
payment_mode VARCHAR(20),
ride_date DATE
);

INSERT INTO uber_cash_payments VALUES
(1, 1601, 'Muthu', 'Cash', '2025-04-05'),
(2, 1601, 'Muthu', 'Cash', '2025-06-15'),
(3, 1601, 'Muthu', 'Cash', '2025-06-15'),
(4, 1602, 'Priya', 'Card', '2025-04-08');
```

Solution (MySQL)

```
WITH total_rides AS (
SELECT customer_id, customer_name, COUNT(*) AS total_rides
FROM uber_cash_payments
WHERE ride date >= DATE SUB(CURDATE(), INTERVAL 3 MONTH)
```

```
GROUP BY customer_id, customer_name
),
cash_rides AS (
    SELECT customer_id, customer_name, COUNT(*) AS cash_rides
    FROM uber_cash_payments
    WHERE payment_mode = 'Cash' AND ride_date >= DATE_SUB(CURDATE(), INTERVAL 3
MONTH)
    GROUP BY customer_id, customer_name
)
SELECT t.customer_id, t.customer_name
FROM total_rides t
JOIN cash_rides c ON t.customer_id = c.customer_id
WHERE t.total_rides = c.cash_rides;
```

Explanation (Tanglish)

Last 3 months rides filter panni, total rides count pannrom, cash rides count pannrom, rendu equal aa irundhaa show pannrom.

Eg: Muthu all rides cash la pay pannirukkanga ✓, Priya card use pannirukkanga X.

🚖 Use Case Value (Tanglish)

Uber and Gowtham can use this to identify **cash-only users** for cash payment offers and risk evaluation.

Problem 16: Netflix - Genre Diversity Watchers

Question (Tanglish)

Gowtham wants to find Netflix users (like Harini, Ajay) who watched content from at least 5 different genres in the last 2 months.

Problem Statement (Tanglish)

Netflix-la last 2 months la 5 different genres watch pannina customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE netflix_genre_watch (
    watch_id INT PRIMARY KEY,
    user_id INT,
    user_name VARCHAR(50),
    genre VARCHAR(30),
    watch_date DATE
);

INSERT INTO netflix_genre_watch VALUES
(1, 1701, 'Harini', 'Action', '2025-05-02'),
(2, 1701, 'Harini', 'Drama', '2025-05-10'),
(3, 1701, 'Harini', 'Comedy', '2025-05-15'),
(4, 1701, 'Harini', 'Thriller', '2025-06-05'),
(5, 1701, 'Harini', 'Romance', '2025-06-10'),
(6, 1702, 'Ajay', 'Action', '2025-06-12');
```

Solution (MySQL)

```
SELECT user_id, user_name, COUNT(DISTINCT genre) AS genre_count FROM netflix_genre_watch WHERE watch_date >= DATE_SUB(CURDATE(), INTERVAL 2 MONTH) GROUP BY user_id, user_name HAVING genre_count >= 5;
```

Explanation (Tanglish)

Last 2 months la data filter pannrom, genre wise count pannrom, 5 genres cross pannina customers identify pannrom.

Eg: Harini 5 genres watch pannirukkanga ✓, Ajay only 1 genre pannirukkanga X.

Use Case Value (Tanglish)

Netflix and Gowtham can use this to identify **diverse genre viewers** for personalized recommendations.

Problem 17: Meta – Daily Story Uploaders

🗱 Question (Tanglish)

Gowtham wants to find Meta users (like Arun, Divya) who uploaded stories daily for 30 consecutive days.

Troblem Statement (Tanglish)

Meta-la 30 days continuous-a daily story upload pannina users identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE meta_story_uploads (
   story_id INT PRIMARY KEY,
   user_id INT,
   user_name VARCHAR(50),
   upload_date DATE
);

INSERT INTO meta_story_uploads VALUES
(1, 1801, 'Arun', '2025-05-01'),
(2, 1801, 'Arun', '2025-05-02'),
-- (add 28 more for Arun)
(31, 1802, 'Divya', '2025-05-01');
```

Solution (MySQL)

```
SELECT user_id, user_name, COUNT(DISTINCT upload_date) AS upload_days FROM meta_story_uploads
WHERE upload_date >= DATE_SUB(CURDATE(), INTERVAL 30 DAY)
GROUP BY user_id, user_name
HAVING upload_days = 30;
```

Explanation (Tanglish)

Last 30 days la daily story upload pannina users identify panna COUNT DISTINCT dates use pannrom. 30 days match aagum pothu show pannrom.

Eg: Arun 30 days continuous story upload pannirukkanga ✓, Divya only 1 day pannirukkanga ✓.

Use Case Value (Tanglish)

Meta and Gowtham can use this to identify **highly active daily story users** for exclusive features and engagement rewards.

Problem 18: Uber – Late Night Frequent Riders

Question (Tanglish)

Gowtham wants to find Uber customers (like Saravanan, Meera) who took rides after 10 PM at least 20 times in the last 2 months.

Problem Statement (Tanglish)

Uber-la last 2 months la 10 PM ku appuram atleast 20 rides edutha customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE uber_late_rides (
  ride id INT PRIMARY KEY,
  customer_id INT,
  customer_name VARCHAR(50),
  ride time TIME,
  ride_date DATE
);
INSERT INTO uber_late_rides VALUES
(1, 1901, 'Saravanan', '22:30:00', '2025-05-05'),
(2, 1901, 'Saravanan', '23:00:00', '2025-05-06'),
-- (add 18 more for Saravanan)
(21, 1902, 'Meera', '21:00:00', '2025-05-05');
```

Solution (MySQL)

```
SELECT customer_id, customer_name, COUNT(*) AS late_rides
FROM uber late rides
WHERE ride time >= '22:00:00' AND ride date >= DATE SUB(CURDATE(), INTERVAL 2
MONTH)
GROUP BY customer id, customer name
HAVING late rides >= 20;
```

Explanation (Tanglish)

✓ Last 2 months la 10 PM mela rides filter pannrom, count pannitu 20 rides cross pannina customers identify pannrom.

Eg: Saravanan 20 rides pannirukkanga 🔽, Meera 10 PM ku mela illa 🗙.



Uber and Gowtham can use this to identify late night frequent riders for targeted offers.

Problem 19: Swiggy – Bulk Order Customers

Question (Tanglish)

Gowtham wants to find Swiggy customers (like Kumar, Anjali) who placed orders above ₹1000 at least 5 times in the last 3 months.

Problem Statement (Tanglish)

Swiggy-la last 3 months la ₹1000 mela order 5 times panna customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE swiggy_bulk_orders (
order_id INT PRIMARY KEY,
customer_id INT,
customer_name VARCHAR(50),
amount DECIMAL(10,2),
order_date DATE
);

INSERT INTO swiggy_bulk_orders VALUES
(1, 2001, 'Kumar', 1200.00, '2025-04-01'),
(2, 2001, 'Kumar', 1500.00, '2025-04-15'),
-- (add 3 more for Kumar)
(6, 2002, 'Anjali', 800.00, '2025-04-10');
```

Solution (MySQL)

SELECT customer_id, customer_name, COUNT(*) AS big_orders

```
FROM swiggy_bulk_orders
WHERE amount >= 1000 AND order_date >= DATE_SUB(CURDATE(), INTERVAL 3 MONTH)
GROUP BY customer_id, customer_name
HAVING big_orders >= 5;
```

Explanation (Tanglish)

Last 3 months data filter panni, ₹1000 mela order count pannitu, 5 times cross pannina customers identify pannrom.

Eg: Kumar 5 big orders pannirukkanga V, Anjali ₹1000 mela illa X

Use Case Value (Tanglish)

Swiggy and Gowtham can use this to identify **bulk order customers** for catering promotions.

Problem 20: Netflix – Binge Watch Series Finishers

Question (Tanglish)

Gowtham wants to find Netflix users (like Rahul, Sneha) who completed an entire series within 2 days.

Problem Statement (Tanglish)

Netflix-la oru series 2 days kuLLa complete pannina users identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE netflix_series_watch (
watch_id INT PRIMARY KEY,
user_id INT,
user_name VARCHAR(50),
series_id INT,
episode_id INT,
watch_date DATE
);

INSERT INTO netflix_series_watch VALUES
(1, 2101, 'Rahul', 301, 1, '2025-06-01'),
```

```
(2, 2101, 'Rahul', 301, 2, '2025-06-01'),
(3, 2101, 'Rahul', 301, 3, '2025-06-02'),
(4, 2102, 'Sneha', 302, 1, '2025-06-01');
```

💡 Solution (MySQL)

```
WITH series_watch_days AS (
  SELECT user_id, user_name, series_id, DATEDIFF(MAX(watch_date), MIN(watch_date)) AS
days_taken, COUNT(DISTINCT episode_id) AS episodes_watched
  FROM netflix_series_watch
  GROUP BY user id, user name, series id
SELECT user id, user name, series id
FROM series_watch_days
WHERE days taken <= 1 AND episodes watched >= 3;
```

Explanation (Tanglish)

Series wise min-max date calculate panni, difference 1 day illa adhu kuLLa irundhaa check pannrom, minimum 3 episodes irundhaa confirm pannrom.

Eg: Rahul 3 episodes 2 days kuLLa finish pannirukkanga , Sneha only 1 episode mattum watch pannirukkanga X.

Use Case Value (Tanglish)

Netflix and Gowtham can use this to identify binge watchers for early content recommendations.

Problem 21: Amazon – Return Request Trackers

🗩 Question (Tanglish)

Gowtham wants to find Amazon customers (like Karthik, Deepa) who raised return requests for more than 5 orders in the last 6 months.

Problem Statement (Tanglish)

Amazon-la last 6 months la 5 mela orders return request panna customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE amazon_returns (
return_id INT PRIMARY KEY,
customer_id INT,
customer_name VARCHAR(50),
order_id INT,
return_date DATE
);

INSERT INTO amazon_returns VALUES
(1, 2201, 'Karthik', 401, '2025-01-15'),
(2, 2201, 'Karthik', 402, '2025-02-20'),
-- (add 4 more for Karthik)
(7, 2202, 'Deepa', 403, '2025-03-05');
```

Solution (MySQL)

SELECT customer_id, customer_name, COUNT(*) AS return_count FROM amazon_returns
WHERE return_date >= DATE_SUB(CURDATE(), INTERVAL 6 MONTH)
GROUP BY customer_id, customer_name
HAVING return_count > 5;

Explanation (Tanglish)

Last 6 months data filter panni, return requests count pannitu 5 cross pannina customers identify pannrom.

Eg: Karthik 6 returns pannirukkanga <a>
✓, Deepa 1 return mattum pannirukkanga <a>
X.

Use Case Value (Tanglish)

Amazon and Gowtham can use this to identify **frequent return request customers** for policy review or proactive support.

Problem 22: Amazon – Mobile and Accessories Together Purchasers

Question (Tanglish)

Gowtham wants to find Amazon customers (like Bharath, Rekha) who purchased a mobile and accessories in the same order.

Problem Statement (Tanglish)

Amazon-la mobile and accessories same order la vaangina customers identify panna vendiyathu for bundle offer targeting.

Create & Insert DDL (MySQL)

```
CREATE TABLE amazon_orders_bundle (
order_id INT,
customer_id INT,
customer_name VARCHAR(50),
product_category VARCHAR(50),
order_date DATE
);

INSERT INTO amazon_orders_bundle VALUES
(501, 2301, 'Bharath', 'Mobile', '2025-06-01'),
(501, 2301, 'Bharath', 'Accessories', '2025-06-01'),
(502, 2302, 'Rekha', 'Mobile', '2025-06-02'),
(503, 2302, 'Rekha', 'Accessories', '2025-06-03');
```

Solution (MySQL)

SELECT customer_id, customer_name, order_id FROM amazon_orders_bundle

WHERE product_category IN ('Mobile', 'Accessories')
GROUP BY customer_id, customer_name, order_id
HAVING COUNT(DISTINCT product_category) = 2;

Explanation (Tanglish)

- SELECT customer_id, customer_name, order_id → Customer, name, and order ID select pannrom.
- FROM amazon_orders_bundle → Table select pannrom.
- WHERE product_category IN ('Mobile', 'Accessories') → Mobile and accessories rows maathiri filter pannrom.
- GROUP BY customer_id, customer_name, order_id → Customer and order wise group pannrom.
- HAVING COUNT(DISTINCT product_category) = 2 → Andha order la rendu category irukkaa nu check pannrom (mobile and accessories iruntha show aagum).

Eg: Bharath same order la mobile and accessories vaangirukkanga **✓**, Rekha separate orders la vaangirukkanga **X**.

Use Case Value (Tanglish)

Amazon and Gowtham can use this to target mobile buyers with accessory bundle offers.

Problem 23: Netflix – Single Day Multiple Device Watchers

Question (Tanglish)

Gowtham wants to find Netflix users (like Suresh, Latha) who watched content on more than 2 devices on the same day.

Problem Statement (Tanglish)

Netflix-la oru naal la 2 devices mela content watch pannina users identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE netflix_device_watch (
watch_id INT,
user_id INT,
user_name VARCHAR(50),
device_name VARCHAR(50),
watch_date DATE
);

INSERT INTO netflix_device_watch VALUES
(601, 2401, 'Suresh', 'Mobile', '2025-06-05'),
(602, 2401, 'Suresh', 'Laptop', '2025-06-05'),
(603, 2401, 'Suresh', 'TV', '2025-06-05'),
(604, 2402, 'Latha', 'Mobile', '2025-06-05');
```

Solution (MySQL)

SELECT user_id, user_name, watch_date FROM netflix_device_watch GROUP BY user_id, user_name, watch_date HAVING COUNT(DISTINCT device_name) > 2;

Explanation (Tanglish)

- SELECT user_id, user_name, watch_date → User, name, date select pannrom.
- FROM netflix_device_watch → Table select pannrom.
- GROUP BY user_id, user_name, watch_date → User and date wise group pannrom.
- HAVING COUNT(DISTINCT device_name) > 2 → Same day la 2 device mela irundhaa show pannrom.

Eg: Suresh 3 devices same day la watch pannirukkanga **☑**, Latha 1 device mattum use pannirukkanga **∑**.

William Use Case Value (Tanglish)

Netflix and Gowtham can use this to identify **heavy multi-device users for family plan promotions.**



Problem 24: Swiggy – Night Owl Customers

Question (Tanglish)

Gowtham wants to find Swiggy customers (like Vasu, Priyanka) who ordered food after midnight at least 10 times in the last month.

Problem Statement (Tanglish)

Swiggy-la last month la 12 AM ku appuram 10 orders pannina customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE swiggy_night_orders (
    order_id INT,
    customer_id INT,
    customer_name VARCHAR(50),
    order_time TIME,
    order_date DATE
);

INSERT INTO swiggy_night_orders VALUES
(701, 2501, 'Vasu', '00:30:00', '2025-06-01'),
(702, 2501, 'Vasu', '01:00:00', '2025-06-02'),
-- (add 8 more for Vasu)
(711, 2502, 'Priyanka', '23:50:00', '2025-06-01');
```

Solution (MySQL)

```
SELECT customer_id, customer_name, COUNT(*) AS night_orders
FROM swiggy_night_orders
WHERE order_time >= '00:00:00' AND order_time < '06:00:00' AND order_date >=
DATE_SUB(CURDATE(), INTERVAL 1 MONTH)
GROUP BY customer_id, customer_name
```

HAVING night_orders >= 10;

Explanation (Tanglish)

- SELECT customer_id, customer_name, COUNT(*) AS night_orders → Customer, name, and night order count select pannrom.
- FROM swiggy_night_orders → Table select pannrom.
- WHERE order_time >= '00:00:00' AND order_time < '06:00:00' →
 Midnight to 6 AM orders filter pannrom.
- AND order_date >= DATE_SUB(CURDATE(), INTERVAL 1 MONTH) → Last 1 month data filter pannrom.
- GROUP BY customer_id, customer_name → Customer wise group pannrom.
- HAVING night_orders >= 10 → 10 orders cross pannina customers show pannrom.

Eg: Vasu 10 night orders pannirukkanga . Priyanka 12 AM ku appuram illa X.

Use Case Value (Tanglish)

Swiggy and Gowtham can use this to identify **night owl customers for special midnight deals.**

Problem 25: Amazon – Customers Buying During Flash Sales

Question (Tanglish)

Gowtham wants to find Amazon customers (like Arjun, Divya) who purchased products during flash sales in the last 3 months.

Problem Statement (Tanglish)

Amazon-la last 3 months flash sale time la purchase pannina customers identify panna vendiyathu for special loyalty tagging.

Create & Insert DDL (MySQL)

```
CREATE TABLE amazon_flash_sales (
order_id INT,
customer_id INT,
customer_name VARCHAR(50),
order_datetime DATETIME
);

INSERT INTO amazon_flash_sales VALUES
(801, 2601, 'Arjun', '2025-06-01 12:05:00'),
(802, 2601, 'Arjun', '2025-06-15 12:10:00'),
(803, 2602, 'Divya', '2025-06-01 14:00:00');
```

Solution (MySQL)

SELECT customer_id, customer_name, COUNT(*) AS flash_orders FROM amazon_flash_sales WHERE TIME(order_datetime) BETWEEN '12:00:00' AND '12:30:00' AND order_datetime >= DATE_SUB(CURDATE(), INTERVAL 3 MONTH) GROUP BY customer_id, customer_name;

Explanation (Tanglish)

- SELECT customer_id, customer_name, COUNT(*) AS flash_orders →
 Customer, name, flash sale orders count select pannrom.
- FROM amazon_flash_sales → Table select pannrom.
- WHERE TIME(order_datetime) BETWEEN '12:00:00' AND '12:30:00' →
 Flash sale time window la irukka filter pannrom.
- AND order_datetime >= DATE_SUB(CURDATE(), INTERVAL 3 MONTH) \rightarrow Last 3 months data filter pannrom.
- \bullet GROUP BY customer_id, customer_name \to Customer wise group pannrom for flash sale tracking.

Eg: Arjun 2 flash sale orders pannirukkanga V, Divya flash window time la illa X.

📦 Use Case Value (Tanglish)

Amazon and Gowtham can use this for flash sale loyal customer targeting and reward programs.

Problem 26: Netflix – Users Watching During Weekend **Nights**

Question (Tanglish)

Gowtham wants to find Netflix users (like Mani, Sneha) who watched movies during weekend nights (Saturday, Sunday after 9 PM) at least 8 times in the last 2 months.

Problem Statement (Tanglish)

Netflix-la last 2 months la Saturday, Sunday 9 PM ku mela 8 times movies watch pannina customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE netflix weekend watch (
  watch_id INT,
  user id INT,
  user name VARCHAR(50),
  watch_datetime DATETIME
);
INSERT INTO netflix weekend watch VALUES
(901, 2701, 'Mani', '2025-06-07 21:30:00'),
(902, 2701, 'Mani', '2025-06-08 22:00:00'),
-- (add 6 more for Mani)
(910, 2702, 'Sneha', '2025-06-07 20:00:00');
```

Solution (MySQL)

```
SELECT user id, user name, COUNT(*) AS weekend night views
FROM netflix weekend watch
WHERE DAYOFWEEK(watch datetime) IN (1,7)
AND TIME(watch datetime) >= '21:00:00'
 AND watch_datetime >= DATE_SUB(CURDATE(), INTERVAL 2 MONTH)
```

GROUP BY user_id, user_name HAVING weekend_night_views >= 8;

Explanation (Tanglish)

- SELECT user_id, user_name, COUNT(*) AS weekend_night_views → User, name, weekend night views count select pannrom.
- FROM netflix_weekend_watch → Table select pannrom.
- WHERE DAYOFWEEK(watch_datetime) IN (1,7) → Saturday (7), Sunday (1) filter pannrom.
- AND TIME(watch_datetime) >= '21:00:00' → 9 PM ku mela irukka filter pannrom.
- AND watch_datetime >= DATE_SUB(CURDATE(), INTERVAL 2 MONTH) → Last 2 months data filter pannrom.
- GROUP BY user_id, user_name → User wise group pannrom.
- HAVING weekend_night_views >= $8 \rightarrow 8$ views cross pannina users select pannrom.

Eg: Mani 8 weekend night views pannirukkanga ✓, Sneha time mismatch aagiduchu X.

Use Case Value (Tanglish)

Netflix and Gowtham can use this to identify weekend binge watchers for night plan offers and recommendations.

ne Problem 27: Uber - Long Distance Riders

Question (Tanglish)

Gowtham wants to find Uber customers (like Raja, Kavitha) who completed rides longer than 30 km at least 5 times in the last 3 months.

Problem Statement (Tanglish)

Uber-la last 3 months la 30 km mela ride 5 times pannina customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE uber_long_rides (
ride_id INT,
customer_id INT,
customer_name VARCHAR(50),
distance_km DECIMAL(5,2),
ride_date DATE
);

INSERT INTO uber_long_rides VALUES
(1001, 2801, 'Raja', 35.5, '2025-04-01'),
(1002, 2801, 'Raja', 40.0, '2025-05-05'),
-- (add 3 more for Raja)
(1006, 2802, 'Kavitha', 25.0, '2025-04-10');
```

Solution (MySQL)

```
SELECT customer_id, customer_name, COUNT(*) AS long_ride_count FROM uber_long_rides
WHERE distance_km > 30 AND ride_date >= DATE_SUB(CURDATE(), INTERVAL 3 MONTH)
GROUP BY customer_id, customer_name
HAVING long_ride_count >= 5;
```

Explanation (Tanglish)

- SELECT customer_id, customer_name, COUNT(*) AS long_ride_count → Customer, name, long ride count select pannrom.
- FROM uber_long_rides → Table select pannrom.
- WHERE distance_km > 30 → 30 km mela irukka filter pannrom.
- AND ride_date >= DATE_SUB(CURDATE(), INTERVAL 3 MONTH) → Last 3 months data filter pannrom.
- GROUP BY customer_id, customer_name → Customer wise group pannrom.

 HAVING long_ride_count >= 5 → 5 times cross panning customers identify pannrom.

Eg: Raja 5 long rides pannirukkanga V, Kavitha distance kammiya irukku X.

🚖 Use Case Value (Tanglish)

Uber and Gowtham can use this for long distance user rewards and personalized pricing.

Problem 28: Amazon – Consistent Monthly Purchasers

Question (Tanglish)

Gowtham wants to find Amazon customers (like Prakash, Swathi) who made at least 1 purchase every month consistently for the last 6 months.

Problem Statement (Tanglish)

Amazon-la last 6 months la monthly atleast 1 purchase pannina customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE amazon_monthly_purchases (
    order_id INT,
    customer_id INT,
    customer_name VARCHAR(50),
    order_date DATE
);

INSERT INTO amazon_monthly_purchases VALUES
(1101, 2901, 'Prakash', '2025-01-15'),
(1102, 2901, 'Prakash', '2025-02-10'),
(1103, 2901, 'Prakash', '2025-03-05'),
(1104, 2901, 'Prakash', '2025-04-20'),
(1105, 2901, 'Prakash', '2025-05-18'),
(1106, 2901, 'Prakash', '2025-06-12'),
(1107, 2902, 'Swathi', '2025-02-10');
```

Solution (MySQL)

```
WITH monthwise AS (
  SELECT customer id, customer name, DATE FORMAT(order date, '%Y-%m') AS
order_month
  FROM amazon monthly purchases
  WHERE order date >= DATE SUB(CURDATE(), INTERVAL 6 MONTH)
  GROUP BY customer_id, customer_name, order_month
SELECT customer id, customer name, COUNT(DISTINCT order month) AS active months
FROM monthwise
GROUP BY customer id, customer name
HAVING active months = 6;
```

X Explanation (Tanglish)

- WITH monthwise AS $(...) \rightarrow \text{Last 6}$ months data extract panni month-wise group panna CTE create pannrom.
- DATE_FORMAT(order_date, '%Y-%m') → Month format la convert pannrom.
- GROUP BY customer_id, customer_name, order_month → Customer and month wise unique data eduthukkrom.
- SELECT customer_id, customer_name, COUNT(DISTINCT order_month) AS active_months → Customer wise unique months count pannrom.
- HAVING active_months = 6 → 6 months continuous purchase pannina customers show pannrom.

Eg: Prakash 6 months continuous purchase pannirukkanga , Swathi 1 month mattum pannirukkanga X.

Use Case Value (Tanglish)

Amazon and Gowtham can use this to identify consistent monthly buyers for loyalty programs and targeted marketing.



🚖 Problem 29: Uber – Frequent Cancellers

Question (Tanglish)

Gowtham wants to find Uber customers (like Gopi, Anitha) who cancelled more than 3 rides in any month in the last 6 months.

Problem Statement (Tanglish)

Uber-la last 6 months la oru month la 3 mela rides cancel pannina customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE uber_cancellations (
    ride_id INT,
    customer_id INT,
    customer_name VARCHAR(50),
    cancel_flag BOOLEAN,
    ride_date DATE
);

INSERT INTO uber_cancellations VALUES
(1201, 3001, 'Gopi', TRUE, '2025-04-01'),
(1202, 3001, 'Gopi', TRUE, '2025-04-02'),
(1203, 3001, 'Gopi', TRUE, '2025-04-03'),
(1204, 3001, 'Gopi', TRUE, '2025-04-04'),
(1205, 3002, 'Anitha', TRUE, '2025-05-10');
```

Solution (MySQL)

```
SELECT customer_id, customer_name, DATE_FORMAT(ride_date, '%Y-%m') AS cancel_month, COUNT(*) AS cancel_count FROM uber_cancellations
WHERE cancel_flag = TRUE AND ride_date >= DATE_SUB(CURDATE(), INTERVAL 6 MONTH)
GROUP BY customer_id, customer_name, cancel_month
HAVING cancel_count > 3;
```

Explanation (Tanglish)

 SELECT customer_id, customer_name, DATE_FORMAT(ride_date, '%Y-%m') AS cancel_month, COUNT(*) AS cancel_count → Customer, name, month, cancellation count select pannrom.

- FROM uber_cancellations \rightarrow Table select pannrom.
- WHERE cancel_flag = TRUE AND ride_date >= DATE_SUB(CURDATE(), INTERVAL 6 MONTH) → Cancelled rides filter pannrom, last 6 months data maathiri filter pannrom.
- GROUP BY customer_id, customer_name, cancel_month → Customer and month wise group pannrom.
- HAVING cancel_count > 3 → Oru month la 3 mela cancel pannina customers identify pannrom.

Eg: Gopi April month la 4 cancellations pannirukkanga [7], Anitha 1 mattum panna [7].

🚖 Use Case Value (Tanglish)

Uber and Gowtham can use this to identify **frequent cancellers for monitoring and policy adjustments**.

Problem 30: Amazon – High Value Single Order Trackers

Question (Tanglish)

Gowtham wants to find Amazon customers (like Vijay, Kavya) who made a single purchase above ₹50,000 in the last year.

Problem Statement (Tanglish)

Amazon-la last 1 year la oru single order ₹50,000 mela spend pannina customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

CREATE TABLE amazon_high_value_orders (order_id INT,

```
customer_id INT,
  customer name VARCHAR(50),
  order amount DECIMAL(10,2),
  order_date DATE
);
INSERT INTO amazon_high_value_orders VALUES
(1301, 3101, 'Vijay', 60000.00, '2025-03-15'),
(1302, 3102, 'Kavya', 45000.00, '2025-02-20');
```

Solution (MySQL)

SELECT customer id, customer name, order id, order amount FROM amazon high value orders WHERE order amount > 50000 AND order date >= DATE SUB(CURDATE(), INTERVAL 1 YEAR);

Explanation (Tanglish)

- SELECT customer_id, customer_name, order_id, order_amount → Customer, name, order ID, amount select pannrom.
- FROM amazon_high_value_orders → Table select pannrom.
- WHERE order_amount > 50000 AND order_date >= DATE_SUB(CURDATE(), INTERVAL 1 YEAR) → Last 1 year la ₹50,000 mela irukkara orders filter pannrom.

Eg: Vijay order 60,000 pannirukkanga <a>V, Kavya 45,000 pannirukkanga <a>X.

Use Case Value (Tanglish)

Amazon and Gowtham can use this to identify high value customers for premium benefits and personalized offers.

Problem 31: Netflix - Consecutive Daily Watchers



Gowtham wants to find Netflix users (like Siva, Meena) who watched at least 1 movie daily for 15 consecutive days.

Problem Statement (Tanglish)

Netflix-la 15 days continuous-a daily atleast 1 movie watch pannina users identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE netflix_daily_watch (
watch_id INT,
user_id INT,
user_name VARCHAR(50),
watch_date DATE
);

INSERT INTO netflix_daily_watch VALUES
(1401, 3201, 'Siva', '2025-05-01'),
(1402, 3201, 'Siva', '2025-05-02'),
-- (add 13 more for Siva)
(1416, 3202, 'Meena', '2025-05-01');
```

Solution (MySQL)

```
SELECT user_id, user_name
FROM (
    SELECT user_id, user_name, COUNT(*) AS consecutive_days
    FROM (
        SELECT user_id, user_name, watch_date,
        DATEDIFF(watch_date, ROW_NUMBER() OVER (PARTITION BY user_id ORDER BY watch_date)) AS grp
        FROM netflix_daily_watch
    ) x
    GROUP BY user_id, user_name, grp
    HAVING consecutive_days >= 15
) y;
```

Explanation (Tanglish)

- Inner SELECT: DATEDIFF(watch_date, ROW_NUMBER() OVER(...)) use pannitu consecutive days group identify pannrom.
- Middle GROUP BY: user, name, grp wise group pannitu consecutive count eduthukkrom.
- HAVING consecutive days >= 15: 15 days continuous watch pannina filter pannrom.
- Outer SELECT: user and name select pannrom for qualified users.

Eg: Siva 15 days continuous watch pannirukkanga V, Meena 1 day mattum pannirukkanga X.

Use Case Value (Tanglish)

Netflix and Gowtham can use this to identify daily active binge watchers for retention strategies and early access promotions.

Problem 32: Amazon – Coupon Dependent Customers

Question (Tanglish)

Gowtham wants to find Amazon customers (like Lokesh, Sandhya) who used coupons in all their orders in the last 4 months.

Problem Statement (Tanglish)

Amazon-la last 4 months la eduththa ella orders-kum coupon use pannina customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE amazon_coupon_orders (
    order_id INT,
    customer_id INT,
    customer_name VARCHAR(50),
    coupon_used BOOLEAN,
    order_date DATE
);
INSERT INTO amazon_coupon_orders VALUES
(1501, 3301, 'Lokesh', TRUE, '2025-03-05'),
```

```
(1502, 3301, 'Lokesh', TRUE, '2025-04-10'),
(1503, 3301, 'Lokesh', TRUE, '2025-05-15'),
(1504, 3302, 'Sandhya', TRUE, '2025-04-12'),
(1505, 3302, 'Sandhya', FALSE, '2025-05-18');
```

Solution (MySQL)

```
WITH total_orders AS (
  SELECT customer id, customer name, COUNT(*) AS total orders
  FROM amazon coupon orders
  WHERE order date >= DATE SUB(CURDATE(), INTERVAL 4 MONTH)
  GROUP BY customer id, customer name
),
coupon_orders AS (
  SELECT customer id, customer name, COUNT(*) AS coupon orders
  FROM amazon_coupon_orders
  WHERE coupon used = TRUE AND order date >= DATE SUB(CURDATE(), INTERVAL 4
MONTH)
  GROUP BY customer id, customer name
SELECT t.customer_id, t.customer_name
FROM total orders t
JOIN coupon orders c ON t.customer id = c.customer id
WHERE t.total_orders = c.coupon_orders;
```

Explanation (Tanglish)

- WITH total_orders AS (...): Last 4 months la eduththa total orders count pannrom.
- WITH coupon_orders AS (...): Last 4 months la coupon use pannina orders mattum count pannrom.
- **JOIN:** total orders and coupon orders customer id moolama join pannrom.
- WHERE t.total_orders = c.coupon_orders: Total orders count and coupon used orders count equal-a irundha customers filter pannrom.

Eg: Lokesh ellaa orders kum coupon use pannirukkanga ✓, Sandhya oru order-la coupon use pannala X.

📦 Use Case Value (Tanglish)

Amazon and Gowtham can use this to identify coupon dependent customers for targeted coupon campaigns.

Problem 33: Netflix – Multi Genre Watchers

Question (Tanglish)

Gowtham wants to find Netflix users (like Hari, Ramya) who watched content from at least 4 different genres in the last 2 months.

Problem Statement (Tanglish)

Netflix-la last 2 months la 4 genres mela content watch pannina customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE netflix genre watchers
  watch_id INT,
  user id INT,
  user name VARCHAR(50),
  genre VARCHAR(30),
  watch date DATE
);
INSERT INTO netflix genre watchers VALUES
(1601, 3401, 'Hari', 'Action', '2025-05-01'),
(1602, 3401, 'Hari', 'Drama', '2025-05-10'),
(1603, 3401, 'Hari', 'Comedy', '2025-05-15'),
(1604, 3401, 'Hari', 'Thriller', '2025-06-01'),
(1605, 3402, 'Ramya', 'Action', '2025-05-05');
```

Solution (MySQL)

```
SELECT user id, user name, COUNT(DISTINCT genre) AS genre count
FROM netflix_genre_watchers
WHERE watch date >= DATE_SUB(CURDATE(), INTERVAL 2 MONTH)
GROUP BY user id, user name
```

HAVING genre_count >= 4;

Explanation (Tanglish)

- SELECT user_id, user_name, COUNT(DISTINCT genre) AS genre_count: User-wise genre diversity count pannrom.
- FROM netflix_genre_watchers: Table select pannrom.
- WHERE watch_date >= DATE_SUB(CURDATE(), INTERVAL 2 MONTH): Last 2
 months data filter pannrom.
- GROUP BY user_id, user_name: User-wise group pannrom.
- HAVING genre count >= 4: 4 genres watch pannina users filter pannrom.

Eg: Hari 4 genres watch pannirukkanga . Ramya 1 genre mattum pannirukkanga X.

Use Case Value (Tanglish)

Netflix and Gowtham can use this to identify **genre diverse viewers for personalized content curation.**

Problem 34: Uber – Inactive Users in Last Month

Question (Tanglish)

Gowtham wants to find Uber customers (like Rohit, Sneha) who did not take any ride in the last 1 month.

Problem Statement (Tanglish)

Uber-la last 1 month la oru ride-um edukkaama inactive-a irundha customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE uber_rides_activity (
ride_id INT,
customer_id INT,
customer_name VARCHAR(50),
ride_date DATE
);

INSERT INTO uber_rides_activity VALUES
(1701, 3501, 'Rohit', '2025-04-15'),
(1702, 3502, 'Sneha', '2025-06-01');
```

Solution (MySQL)

```
SELECT DISTINCT customer_id, customer_name
FROM uber_rides_activity
WHERE customer_id NOT IN (
    SELECT DISTINCT customer_id
    FROM uber_rides_activity
    WHERE ride_date >= DATE_SUB(CURDATE(), INTERVAL 1 MONTH)
);
```

Explanation (Tanglish)

- Inner SELECT: Last 1 month la ride edutha customers select pannrom.
- Outer SELECT: andha customers illadha customer id matta select pannrom.
- **DISTINCT:** duplicate records varakoodaadhu nu prevent pannrom.

Eg: Rohit last 1 month la ride edukkaala ✓, Sneha ride eduthirukkanga **X**.

Use Case Value (Tanglish)

Uber and Gowtham can use this to identify inactive users for re-engagement campaigns.

📦 Problem 35: Amazon – Electronics & Fashion Combo **Buyers**

Question (Tanglish)

Gowtham wants to find Amazon customers (like Ramesh, Priya) who purchased both electronics and fashion products in the same month.

Problem Statement (Tanglish)

Amazon-la orae month la electronics-um fashion-um vaangina customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE amazon_category_purchases (
  order id INT,
  customer id INT,
  customer_name VARCHAR(50),
  category VARCHAR(30),
  order_date DATE
);
INSERT INTO amazon_category_purchases VALUES
(1801, 3601, 'Ramesh', 'Electronics', '2025-05-05'),
(1802, 3601, 'Ramesh', 'Fashion', '2025-05-15'),
(1803, 3602, 'Priya', 'Electronics', '2025-05-10');
```

💡 Solution (MySQL)

```
SELECT customer_id, customer_name, DATE_FORMAT(order_date, '%Y-%m') AS
order month
FROM amazon category purchases
WHERE category IN ('Electronics', 'Fashion')
GROUP BY customer id, customer name, order month
HAVING COUNT(DISTINCT category) = 2;
```

X Explanation (Tanglish)

- WHERE category IN ('Electronics', 'Fashion') → Iru category la irukka filter pannrom.
- **DATE_FORMAT(order_date, '%Y-%m')** → Month wise extract pannrom.
- GROUP BY customer_id, customer_name, order_month → Customer and month wise group pannrom.
- HAVING COUNT(DISTINCT category) = 2 → Andha month la rendu category irundha users select pannrom.

Eg: Ramesh same month la Electronics & Fashion vaangirukkanga ✓, Priya fashion vaangala X.

Use Case Value (Tanglish)

Amazon and Gowtham can use this to identify combo buyers for cross-sell and upsell offers.

Problem 36: Netflix - Heavy Reviewers

Question (Tanglish)

Gowtham wants to find Netflix users (like Aravind, Divya) who reviewed at least 20 movies in the last 3 months.

Problem Statement (Tanglish)

Netflix-la last 3 months la 20 movies ku mela review kudutha users identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE netflix_reviews (
    review_id INT,
    user_id INT,
    user_name VARCHAR(50),
    movie_id INT,
    review_date DATE
);

INSERT INTO netflix_reviews VALUES
(1901, 3701, 'Aravind', 501, '2025-04-01'),
(1902, 3701, 'Aravind', 502, '2025-04-02'),
-- (add 18 more for Aravind)
```

(1921, 3702, 'Divya', 503, '2025-05-10');



Solution (MySQL)

SELECT user id, user name, COUNT(*) AS review count FROM netflix reviews WHERE review_date >= DATE_SUB(CURDATE(), INTERVAL 3 MONTH) GROUP BY user id, user name HAVING review count >= 20;

Explanation (Tanglish)

- SELECT user_id, user_name, COUNT(*) AS review_count: User and review count select pannrom.
- FROM netflix_reviews: Table select pannrom.
- WHERE review_date >= DATE_SUB(CURDATE(), INTERVAL 3 MONTH): Last 3 months data filter pannrom.
- **GROUP BY user_id, user_name:** User wise group pannrom.
- HAVING review count >= 20: 20 reviews cross pannina users filter pannrom.

Eg: Aravind 20 reviews pannirukkanga . Divya 1 review mattum pannirukkanga .



Netflix and Gowtham can use this to identify heavy reviewers for advanced recommendations and beta features.



Problem 37: Uber – Same Day Multi-City Travellers



Gowtham wants to find Uber customers (like Sanjay, Keerthi) who took rides in more than 1 city on the same day.

Problem Statement (Tanglish)

Uber-la orae naal la 2 city la ride edutha customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE uber_multi_city_rides (
    ride_id INT,
    customer_id INT,
    customer_name VARCHAR(50),
    city VARCHAR(50),
    ride_date DATE
);

INSERT INTO uber_multi_city_rides VALUES
(2001, 3801, 'Sanjay', 'Chennai', '2025-06-10'),
(2002, 3801, 'Sanjay', 'Bangalore', '2025-06-10'),
(2003, 3802, 'Keerthi', 'Chennai', '2025-06-11');
```

Solution (MySQL)

SELECT customer_id, customer_name, ride_date, COUNT(DISTINCT city) AS cities_count FROM uber_multi_city_rides GROUP BY customer_id, customer_name, ride_date HAVING cities_count > 1;

Explanation (Tanglish)

- SELECT customer_id, customer_name, ride_date, COUNT(DISTINCT city) AS cities_count: Customer, name, date and unique city count select pannrom.
- FROM uber_multi_city_rides: Table select pannrom.
- **GROUP BY customer_id, customer_name, ride_date:** Customer and date wise group pannrom.
- **HAVING cities_count > 1:** Oru naal la 2 city la ride edutha users filter pannrom.

Eg: Sanjay same day la 2 city la ride pannirukkanga ✓, Keerthi 1 city la mattum pannirukkanga ✓.

Use Case Value (Tanglish)

Uber and Gowtham can use this to identify frequent multi-city travellers for premium ride plans.

Problem 36: Netflix – Heavy Reviewers

Question (Tanglish)

Gowtham wants to find Netflix users (like Aravind, Divya) who reviewed at least 20 movies in the last 3 months.

Problem Statement (Tanglish)

Netflix-la last 3 months la 20 movies ku mela review kudutha users identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE netflix_reviews (
  review id INT,
  user id INT,
  user_name VARCHAR(50),
  movie id INT,
  review_date DATE
);
INSERT INTO netflix_reviews VALUES
(1901, 3701, 'Aravind', 501, '2025-04-01'),
(1902, 3701, 'Aravind', 502, '2025-04-02'),
-- (add 18 more for Aravind)
(1921, 3702, 'Divya', 503, '2025-05-10');
```

Solution (MySQL)

```
SELECT user id, user name, COUNT(*) AS review count
FROM netflix_reviews
WHERE review date >= DATE SUB(CURDATE(), INTERVAL 3 MONTH)
GROUP BY user id, user name
HAVING review_count >= 20;
```

Explanation (Tanglish)

- SELECT user_id, user_name, COUNT(*) AS review_count: User and review count select pannrom.
- FROM netflix_reviews: Table select pannrom.
- WHERE review_date >= DATE_SUB(CURDATE(), INTERVAL 3 MONTH): Last 3
 months data filter pannrom.
- **GROUP BY user_id**, **user_name**: User wise group pannrom.
- HAVING review_count >= 20: 20 reviews cross pannina users filter pannrom.

Eg: Aravind 20 reviews pannirukkanga V, Divya 1 review mattum pannirukkanga X.

William Use Case Value (Tanglish)

Netflix and Gowtham can use this to identify heavy reviewers for advanced recommendations and beta features.

Problem 37: Uber - Same Day Multi-City Travellers

Question (Tanglish)

Gowtham wants to find Uber customers (like Sanjay, Keerthi) who took rides in more than 1 city on the same day.

Problem Statement (Tanglish)

Uber-la orae naal la 2 city la ride edutha customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE uber_multi_city_rides (
    ride_id INT,
    customer_id INT,
    customer_name VARCHAR(50),
    city VARCHAR(50),
    ride_date DATE
);
```

```
INSERT INTO uber_multi_city_rides VALUES
(2001, 3801, 'Sanjay', 'Chennai', '2025-06-10'),
(2002, 3801, 'Sanjay', 'Bangalore', '2025-06-10'),
(2003, 3802, 'Keerthi', 'Chennai', '2025-06-11');
```

Solution (MySQL)

SELECT customer_id, customer_name, ride_date, COUNT(DISTINCT city) AS cities count FROM uber_multi_city_rides GROUP BY customer id, customer name, ride date HAVING cities count > 1;

X Explanation (Tanglish)

- SELECT customer_id, customer_name, ride_date, COUNT(DISTINCT city) AS cities count: Customer, name, date and unique city count select pannrom.
- FROM uber_multi_city_rides: Table select pannrom.
- GROUP BY customer id, customer name, ride date: Customer and date wise group pannrom.
- HAVING cities count > 1: Oru naal la 2 city la ride edutha users filter pannrom.

Eq: Sanjay same day la 2 city la ride pannirukkanga . Keerthi 1 city la mattum pannirukkanga

Use Case Value (Tanglish)

Uber and Gowtham can use this to identify frequent multi-city travellers for premium ride plans.

Problem 41: Uber – Users Taking Rides with Same **Driver Frequently**

Question (Tanglish)

Gowtham wants to find Uber customers (like Karthik, Deepa) who took rides with the same driver at least 10 times in the last 6 months.

Problem Statement (Tanglish)

Uber-la last 6 months la orae driver kitta 10 rides edutha customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE uber_driver_rides (
ride_id INT,
customer_id INT,
customer_name VARCHAR(50),
driver_id INT,
driver_name VARCHAR(50),
ride_date DATE
);

INSERT INTO uber_driver_rides VALUES
(2401, 4201, 'Karthik', 501, 'Ravi', '2025-01-15'),
(2402, 4201, 'Karthik', 501, 'Ravi', '2025-02-10'),
-- (add 8 more for Karthik)
(2411, 4202, 'Deepa', 502, 'Arun', '2025-03-12');
```

Solution (MySQL)

```
SELECT customer_id, customer_name, driver_id, driver_name, COUNT(*) AS ride_count FROM uber_driver_rides
WHERE ride_date >= DATE_SUB(CURDATE(), INTERVAL 6 MONTH)
GROUP BY customer_id, customer_name, driver_id, driver_name
HAVING ride count >= 10;
```

is Explanation (Tanglish)

- SELECT customer_id, customer_name, driver_id, driver_name, COUNT(*) AS ride_count: Customer, driver, and ride count select pannrom.
- FROM uber_driver_rides: Table select pannrom.
- WHERE ride_date >= DATE_SUB(CURDATE(), INTERVAL 6 MONTH): Last 6 months data filter pannrom.
- **GROUP BY customer_id, customer_name, driver_id, driver_name:** Customer and driver wise group pannrom.

• **HAVING ride_count >= 10:** 10 rides cross pannina users filter pannrom.

Eq: Karthik 10 rides Ravi driver kooda pannirukkanga . Deepa Arun driver kooda 1 ride mattum pannirukkanga X.



Use Case Value (Tanglish)

Uber and Gowtham can use this to identify trusted driver-user relationships for premium loyalty plans.

Problem 42: Amazon – Festival Season Buyers

Question (Tanglish)

Gowtham wants to find Amazon customers (like Harini, Ajith) who made purchases during all major festivals in the last year.

Problem Statement (Tanglish)

Amazon-la last 1 year festival season la ellaa major festivals kum purchase pannina customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE amazon_festival_orders (
  order id INT,
  customer id INT,
  customer_name VARCHAR(50),
  festival name VARCHAR(50),
  order_date DATE
);
INSERT INTO amazon_festival_orders VALUES
(2501, 4301, 'Harini', 'Diwali', '2024-11-10'),
(2502, 4301, 'Harini', 'Pongal', '2025-01-15'),
(2503, 4301, 'Harini', 'Tamil New Year', '2025-04-14'),
(2504, 4302, 'Ajith', 'Diwali', '2024-11-10');
```

Solution (MySQL)

SELECT customer_id, customer_name, COUNT(DISTINCT festival_name) AS festivals_covered FROM amazon_festival_orders WHERE order_date >= DATE_SUB(CURDATE(), INTERVAL 1 YEAR) GROUP BY customer_id, customer_name HAVING festivals_covered = 3;

Explanation (Tanglish)

- SELECT customer_id, customer_name, COUNT(DISTINCT festival_name) AS festivals_covered: Customer wise unique festivals count pannrom.
- FROM amazon_festival_orders: Table select pannrom.
- WHERE order_date >= DATE_SUB(CURDATE(), INTERVAL 1 YEAR): Last 1 year data filter pannrom.
- GROUP BY customer_id, customer_name: Customer wise group pannrom.
- HAVING festivals_covered = 3: 3 major festivals la purchase pannina customers filter pannrom.

Eg: Harini 3 festival purchase pannirukkanga V, Ajith 1 festival mattum pannirukkanga X.

Use Case Value (Tanglish)

Amazon and Gowtham can use this to identify festival loyal buyers for festival combo offers.

Problem 43: Netflix – Documentary Watch Enthusiasts

Question (Tanglish)

Gowtham wants to find Netflix users (like Saran, Divya) who watched at least 5 different documentaries in the last 3 months.

Problem Statement (Tanglish)

Netflix-la last 3 months la 5 different documentaries watch pannina customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE netflix_documentary_watch (
    watch_id INT,
    user_id INT,
    user_name VARCHAR(50),
    documentary_name VARCHAR(100),
    watch_date DATE
);

INSERT INTO netflix_documentary_watch VALUES
(2601, 4401, 'Saran', 'Planet Earth', '2025-04-05'),
(2602, 4401, 'Saran', 'Our Planet', '2025-04-10'),
(2603, 4401, 'Saran', 'Inside Bill's Brain', '2025-05-01'),
(2604, 4401, 'Saran', 'The Social Dilemma', '2025-05-15')
(2605, 4401, 'Saran', 'Explained', '2025-06-01'),
(2606, 4402, 'Divya', 'Planet Earth', '2025-05-10');
```

Solution (MySQL)

```
SELECT user_id, user_name, COUNT(DISTINCT documentary_name) AS docu_count FROM netflix_documentary_watch WHERE watch_date >= DATE_SUB(CURDATE(), INTERVAL 3 MONTH) GROUP BY user_id, user_name HAVING docu_count >= 5;
```

is Explanation (Tanglish)

- SELECT user_id, user_name, COUNT(DISTINCT documentary_name) AS docu count: User wise unique documentaries count pannrom.
- FROM netflix_documentary_watch: Table select pannrom.
- WHERE watch_date >= DATE_SUB(CURDATE(), INTERVAL 3 MONTH): Last 3
 months data filter pannrom.
- GROUP BY user_id, user_name: User wise group pannrom.

• **HAVING docu_count >= 5:** 5 documentaries watch panning users filter pannrom.

Eg: Saran 5 documentaries watch pannirukkanga **∑**, Divya 1 documentary mattum pannirukkanga **∑**.

William Use Case Value (Tanglish)

Netflix and Gowtham can use this to identify **documentary enthusiasts for premium recommendations and niche content targeting**.

Problem 44: Amazon – Same Day Multiple Orders

Question (Tanglish)

Gowtham wants to find Amazon customers (like Surya, Meena) who placed more than 3 orders on the same day in the last 2 months.

Troblem Statement (Tanglish)

Amazon-la last 2 months la orae naal la 3 mela orders pannina customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE amazon_same_day_orders (
    order_id INT,
    customer_id INT,
    customer_name VARCHAR(50),
    order_date DATE
);

INSERT INTO amazon_same_day_orders VALUES
(2701, 4501, 'Surya', '2025-05-10'),
(2702, 4501, 'Surya', '2025-05-10'),
(2703, 4501, 'Surya', '2025-05-10'),
(2704, 4501, 'Surya', '2025-05-10'),
(2705, 4502, 'Meena', '2025-05-12');
```

Solution (MySQL)

SELECT customer_id, customer_name, order_date, COUNT(*) AS orders_count

FROM amazon_same_day_orders
WHERE order_date >= DATE_SUB(CURDATE(), INTERVAL 2 MONTH)
GROUP BY customer_id, customer_name, order_date
HAVING orders_count > 3;

Explanation (Tanglish)

- SELECT customer_id, customer_name, order_date, COUNT(*) AS orders_count: Customer, name, date, orders count select pannrom.
- FROM amazon_same_day_orders: Table select pannrom.
- WHERE order_date >= DATE_SUB(CURDATE(), INTERVAL 2 MONTH): Last 2
 months data filter pannrom.
- GROUP BY customer_id, customer_name, order_date: Customer and date wise group pannrom.
- HAVING orders_count > 3: Oru naal la 3 mela orders pannina customers filter pannrom.

Eg: Surya orae naal la 4 orders pannirukkanga V, Meena 1 order mattum pannirukkanga X.



Amazon and Gowtham can use this to identify **heavy buyers for same-day premium delivery offers.**

Problem 45: Netflix – Users Watching Same Movie Multiple Times

Question (Tanglish)

Gowtham wants to find Netflix users (like Kishore, Aishwarya) who watched the same movie at least 3 times in the last 1 month.

Problem Statement (Tanglish)

Netflix-la last 1 month la orae movie 3 times watch pannina customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE netflix_repeat_watch (
watch_id INT,
user_id INT,
user_name VARCHAR(50),
movie_name VARCHAR(100),
watch_date DATE
);

INSERT INTO netflix_repeat_watch VALUES
(2801, 4601, 'Kishore', 'Inception', '2025-06-01'),
(2802, 4601, 'Kishore', 'Inception', '2025-06-05'),
(2803, 4601, 'Kishore', 'Inception', '2025-06-10'),
(2804, 4602, 'Aishwarya', 'Interstellar', '2025-06-03');
```

Solution (MySQL)

```
SELECT user_id, user_name, movie_name, COUNT(*) AS watch_count FROM netflix_repeat_watch WHERE watch_date >= DATE_SUB(CURDATE(), INTERVAL 1 MONTH) GROUP BY user_id, user_name, movie_name HAVING watch_count >= 3;
```

Explanation (Tanglish)

- SELECT user_id, user_name, movie_name, COUNT(*) AS watch_count: User, name, movie name, watch count select pannrom.
- FROM netflix_repeat_watch: Table select pannrom.
- WHERE watch_date >= DATE_SUB(CURDATE(), INTERVAL 1 MONTH): Last 1 month data filter pannrom.
- **GROUP BY user_id**, **user_name**, **movie_name**: User and movie wise group pannrom.
- **HAVING watch_count >= 3:** Oru movie 3 times watch pannina users filter pannrom.

Eg: Kishore 'Inception' 3 times watch pannirukkanga ✓, Aishwarya 'Interstellar' 1 time mattum pannirukkanga X.

Use Case Value (Tanglish)

Netflix and Gowtham can use this to identify **repeat watchers for movie recommendation refinement.**

Question (Tanglish)

Gowtham wants to find Amazon customers (like Rahul, Priya) who added products to wishlist and purchased the same within 7 days.

Problem Statement (Tanglish)

Amazon-la wishlist ku add pannina product-ah 7 days kuLLa vaangina customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE amazon_wishlist (
   wishlist_id INT,
   customer_id INT,
   customer_name VARCHAR(50),
   product_id INT,
   added_date DATE
);

CREATE TABLE amazon_purchases (
   purchase_id INT,
   customer_id INT,
   product_id INT,
   purchase_date DATE
);
```

INSERT INTO amazon_wishlist VALUES (2901, 4701, 'Rahul', 601, '2025-06-01'), (2902, 4702, 'Priya', 602, '2025-06-05'); INSERT INTO amazon purchases VALUES (3001, 4701, 601, '2025-06-05'), (3002, 4702, 602, '2025-06-20');

Solution (MySQL)

SELECT w.customer_id, w.customer_name, w.product id FROM amazon wishlist w JOIN amazon purchases p ON w.customer id = p.customer id AND w.product id = p.product id WHERE DATEDIFF(p.purchase_date, w.added_date) BETWEEN 0 AND 7;

関 Explanation (Tanglish)

- **JOIN:** Wishlist and purchases table customer_id and product_id moolama join pannrom.
- DATEDIFF(p.purchase_date, w.added_date) BETWEEN 0 AND 7: Wishlist add pannina date-la irundhu 7 days kuLLa purchase pannirukkangala-nu filter pannrom.

Eg: Rahul 4 days kuLLa vaangirukkanga , Priya 15 days la vaangirukkanga .



Amazon and Gowtham can use this to identify wishlist converters for fast-purchase targeting campaigns.

Problem 47: Netflix - Consistent Weekly Watchers

Question (Tanglish)

Gowtham wants to find Netflix users (like Manoj, Divya) who watched at least 1 movie every week for the last 8 weeks.

Problem Statement (Tanglish)

Netflix-la last 8 weeks la weekly 1 movie watch pannina customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE netflix_weekly_watch (
  watch id INT,
  user id INT,
  user name VARCHAR(50),
  watch date DATE
);
INSERT INTO netflix weekly watch VALUES
(3101, 4801, 'Manoj', '2025-04-01'),
(3102, 4801, 'Manoj', '2025-04-08'),
(3103, 4801, 'Manoj', '2025-04-15'),
(3104, 4801, 'Manoj', '2025-04-22'),
(3105, 4801, 'Manoj', '2025-04-29'),
(3106, 4801, 'Manoj', '2025-05-06'),
(3107, 4801, 'Manoj', '2025-05-13'),
(3108, 4801, 'Manoj', '2025-05-20'),
(3109, 4802, 'Divya', '2025-05-10');
```

Solution (MySQL)

```
SELECT user_id, user_name, COUNT(DISTINCT YEARWEEK(watch_date)) AS weeks_watched FROM netflix_weekly_watch WHERE watch_date >= DATE_SUB(CURDATE(), INTERVAL 8 WEEK) GROUP BY user_id, user_name HAVING weeks_watched = 8;
```

Explanation (Tanglish)

- YEARWEEK(watch_date): Watch week identify panna use pannrom.
- **COUNT(DISTINCT YEARWEEK(watch_date)) = 8:** 8 weeks la continuous watch pannina users filter pannrom.

Eg: Manoj 8 weeks la watch pannirukkanga <a>
▼, Divya oru week mattum pannirukkanga <a>
X.



Netflix and Gowtham can use this to identify weekly consistent viewers for retention plans.



Problem 48: Uber – Peak Hour Riders

Question (Tanglish)

Gowtham wants to find Uber customers (like Hari, Sangeetha) who took rides during peak hours (8 AM - 10 AM) at least 10 times in the last 2 months.

Problem Statement (Tanglish)

Uber-la last 2 months la peak hours (8-10 AM) la 10 rides pannina customers identify panna vendiyathu.

X Create & Insert DDL (MySQL)

```
CREATE TABLE uber peak rides (
  ride id INT,
  customer id INT,
  customer_name VARCHAR(50),
  ride_time TIME,
  ride date DATE
);
INSERT INTO uber peak rides VALUES
(3201, 4901, 'Hari', '08:15:00', '2025-05-01'),
(3202, 4901, 'Hari', '09:00:00', '2025-05-03'),
-- (add 8 more for Hari)
(3211, 4902, 'Sangeetha', '07:45:00', '2025-05-05');
```

Solution (MySQL)

```
SELECT customer_id, customer_name, COUNT(*) AS peak_rides
FROM uber peak rides
WHERE TIME(ride time) BETWEEN '08:00:00' AND '10:00:00' AND ride date >=
DATE_SUB(CURDATE(), INTERVAL 2 MONTH)
GROUP BY customer id, customer name
HAVING peak_rides >= 10;
```

Explanation (Tanglish)

- TIME(ride_time) BETWEEN '08:00:00' AND '10:00:00': 8-10 AM rides filter pannrom.
- **COUNT(*)** >= **10**: 10 rides cross pannina customers filter pannrom.

Eg: Hari 10 rides pannirukkanga <a>
▼, Sangeetha 7:45 la irundhudhu <a>
X.

🚖 Use Case Value (Tanglish)

Uber and Gowtham can use this to identify **peak hour users for surge pricing and targeted discounts.**

Problem 49: Amazon – Subscription Box Repeat Buyers

Question (Tanglish)

Gowtham wants to find Amazon customers (like Arjun, Sneha) who purchased the same subscription box for 3 consecutive months.

Problem Statement (Tanglish)

Amazon-la orae subscription box 3 months continuous-a vaangina customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE amazon_subscription_orders (
    order_id INT,
    customer_id INT,
    customer_name VARCHAR(50),
    subscription_box VARCHAR(50),
    order_date DATE
);
INSERT INTO amazon_subscription_orders VALUES
(3301, 5001, 'Arjun', 'Wellness Box', '2025-03-05'),
(3302, 5001, 'Arjun', 'Wellness Box', '2025-04-07'),
```

(3303, 5001, 'Arjun', 'Wellness Box', '2025-05-06'), (3304, 5002, 'Sneha', 'Grooming Box', '2025-05-10');

Solution (MySQL)

SELECT customer_id, customer_name, subscription_box, COUNT(DISTINCT DATE_FORMAT(order_date, '%Y-%m')) AS months_count FROM amazon_subscription_orders WHERE order_date >= DATE_SUB(CURDATE(), INTERVAL 3 MONTH) GROUP BY customer_id, customer_name, subscription_box HAVING months_count = 3;

Explanation (Tanglish)

- DATE_FORMAT(order_date, '%Y-%m'): Month wise group panna format pannrom.
- **COUNT(DISTINCT month) = 3:** 3 months continuous subscription buyers filter pannrom.

Eg: Arjun 3 months continuous purchase pannirukkanga ✓, Sneha 1 month mattum pannirukkanga X.

Use Case Value (Tanglish)

Amazon and Gowtham can use this to identify subscription loyal buyers for rewards.

Problem 50: Netflix - Genre Consistency Watchers

Question (Tanglish)

Gowtham wants to find Netflix users (like Kavin, Asha) who watched movies of the same genre for 4 consecutive weeks.

Problem Statement (Tanglish)

Netflix-la 4 weeks continuous-a orae genre movies watch pannina customers identify panna vendiyathu.

X Create & Insert DDL (MySQL)

```
CREATE TABLE netflix_genre_consistency (
    watch_id INT,
    user_id INT,
    user_name VARCHAR(50),
    genre VARCHAR(50),
    watch_date DATE
);

INSERT INTO netflix_genre_consistency VALUES
(3401, 5101, 'Kavin', 'Thriller', '2025-05-01'),
(3402, 5101, 'Kavin', 'Thriller', '2025-05-08'),
(3403, 5101, 'Kavin', 'Thriller', '2025-05-15'),
(3404, 5101, 'Kavin', 'Thriller', '2025-05-22'),
(3405, 5102, 'Asha', 'Drama', '2025-05-10');
```

Solution (MySQL)

```
SELECT user_id, user_name, genre, COUNT(DISTINCT YEARWEEK(watch_date)) AS weeks_count FROM netflix_genre_consistency WHERE watch_date >= DATE_SUB(CURDATE(), INTERVAL 1 MONTH) GROUP BY user_id, user_name, genre HAVING weeks_count = 4;
```

Explanation (Tanglish)

- YEARWEEK(watch_date): Week wise identify panna.
- **COUNT DISTINCT week = 4:** 4 weeks continuous same genre watch pannina users filter pannrom.

Eg: Kavin 4 weeks continuous Thriller watch pannirukkanga **✓**, Asha 1 week mattum pannirukkanga **X**.

W Use Case Value (Tanglish)

Netflix and Gowtham can use this to identify **genre loyal viewers for niche content promotion.**

Problem 51: Amazon – Orders Placed on Every Cricket Match Day

★ Question (Tanglish)

Gowtham wants to find Amazon customers (like Arun, Divya) who placed at least 1 order on **every IPL cricket match day** in the last season.

Problem Statement (Tanglish)

IPL cricket match days la ellathulayum atleast 1 order pannina customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE cricket_match_days (
  match date DATE
);
CREATE TABLE amazon orders cricket (
  order_id INT,
  customer id INT,
  customer name VARCHAR(50)
  order_date DATE
);
INSERT INTO cricket_match_days VALUES
('2025-04-01'), ('2025-04-05'), ('2025-04-10');
INSERT INTO amazon orders cricket VALUES
(401, 6001, 'Arun', '2025-04-01'),
(402, 6001, 'Arun', '2025-04-05'),
(403, 6001, 'Arun', '2025-04-10'),
(404, 6002, 'Divya', '2025-04-01'),
(405, 6002, 'Divya', '2025-04-05');
```

Solution (MySQL)

SELECT customer_id, customer_name

FROM amazon_orders_cricket

WHERE order_date IN (SELECT match_date FROM cricket_match_days)

GROUP BY customer_id, customer_name

HAVING COUNT(DISTINCT order_date) = (SELECT COUNT(*) FROM cricket_match_days);

Explanation (Tanglish)

- **cricket_match_days:** IPL match dates maintain pannum table.
- amazon_orders_cricket: Orders table with customer and order date.
- WHERE order date IN (match date): Match days la irukkara orders filter pannrom.
- GROUP BY customer_id, customer_name: Customer wise group pannrom.
- **HAVING COUNT = total match days:** Ellaa match days la order pannina customers filter pannrom.

Eg: Arun ellaa 3 match days la order pannirukkanga **✓**, Divya 2 match days la mattum pannirukkanga **X**.

Use Case Value (Tanglish)

Amazon and Gowtham can use this to identify **cricket season loyal buyers for targeted sports campaign offers.**

Problem 52: Swiggy – Orders Placed During Every Rainy Day

Question (Tanglish)

Gowtham wants to find Swiggy customers (like Bala, Priya) who placed at least 1 order on **every rainy day** in Chennai last month.

Troblem Statement (Tanglish)

Chennai last month rainy days la ellathulayum atleast 1 order pannina Swiggy customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE chennai_rainy_days (
  rainy date DATE
);
CREATE TABLE swiggy orders rain (
  order_id INT,
  customer id INT,
  customer_name VARCHAR(50),
  order date DATE
);
INSERT INTO chennai rainy days VALUES
('2025-06-01'), ('2025-06-05'), ('2025-06-10');
INSERT INTO swiggy orders rain VALUES
(501, 6101, 'Bala', '2025-06-01'),
(502, 6101, 'Bala', '2025-06-05'),
(503, 6101, 'Bala', '2025-06-10'),
(504, 6102, 'Priya', '2025-06-01'),
(505, 6102, 'Priya', '2025-06-05');
```

Solution (MySQL)

SELECT customer_id, customer_name
FROM swiggy_orders_rain
WHERE order_date IN (SELECT rainy_date FROM chennai_rainy_days)
GROUP BY customer_id, customer_name
HAVING COUNT(DISTINCT order_date) = (SELECT COUNT(*) FROM chennai_rainy_days);

Explanation (Tanglish)

- **chennai_rainy_days:** Chennai rainy days maintain panna table.
- swiggy_orders_rain: Swiggy orders with customer and order date.
- WHERE order_date IN (rainy_date): Rainy days la irukkara orders filter pannrom.
- GROUP BY customer_id, customer_name: Customer wise group pannrom.

• HAVING COUNT = total rainy days: Ellaa rainy days la order pannina customers filter pannrom.

Eg: Bala ellaa 3 rainy days la order pannirukkanga 🔽, Priya 2 days la mattum pannirukkanga X.



🌞 Use Case Value (Tanglish)

Swiggy and Gowtham can use this to identify rainy day loyal customers for weather-based offers.

Problem 53: Netflix - Users Watching New Releases on Release Day

Question (Tanglish)

Gowtham wants to find Netflix users (like Karthik, Anjali) who watched every new Tamil movie release on the release day in the last 2 months.

Problem Statement (Tanglish)

Netflix-la last 2 months la Tamil new release movies release day la ellathayum watch pannina users identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE tamil_movie_releases (
  movie_name VARCHAR(100),
  release date DATE
);
CREATE TABLE netflix_watch_release_day (
  watch_id INT,
  user_id INT,
  user name VARCHAR(50),
  movie name VARCHAR(100),
  watch date DATE
);
```

```
INSERT INTO tamil_movie_releases VALUES ('Movie A', '2025-05-01'), ('Movie B', '2025-05-10'), ('Movie C', '2025-05-20');

INSERT INTO netflix_watch_release_day VALUES (601, 6201, 'Karthik', 'Movie A', '2025-05-01'), (602, 6201, 'Karthik', 'Movie B', '2025-05-10'), (603, 6201, 'Karthik', 'Movie C', '2025-05-20'), (604, 6202, 'Anjali', 'Movie A', '2025-05-01'), (605, 6202, 'Anjali', 'Movie B', '2025-05-10');
```

Solution (MySQL)

SELECT user_id, user_name
FROM netflix_watch_release_day
WHERE (movie_name, watch_date) IN (SELECT movie_name, release_date FROM tamil_movie_releases)
GROUP BY user_id, user_name
HAVING COUNT(DISTINCT movie_name) = (SELECT COUNT(*) FROM tamil_movie_releases);

in Explanation (Tanglish)

- **tamil_movie_releases:** Tamil movie releases with name and release date maintain pannrom.
- **netflix_watch_release_day:** User watch data with movie and watch date maintain pannrom.
- WHERE (movie_name, watch_date) IN (movie_name, release_date): Release day la irukkara watch records filter pannrom.
- GROUP BY user_id, user_name: User wise group pannrom.
- HAVING COUNT = total releases: Ellaa releases day la watch pannina users filter pannrom.

Eg: Karthik 3 releases day la watch pannirukkanga ✓, Anjali 2 releases la mattum pannirukkanga X.

William Use Case Value (Tanglish)

Netflix and Gowtham can use this to identify release day loyal viewers for early access and premium content campaigns.

Problem 54: Amazon – Customers Who Only Ordered Sweets During Festivals

Question (Tanglish)

Find customers who only ordered sweets during festivals.

Problem Statement (Tanglish)

Festival days la sweets mattum than order pannina Amazon customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE festival_days (
  festival date DATE
);
CREATE TABLE amazon orders festival (
  order_id INT,
  customer id INT,
  customer name VARCHAR(50),
  product_category VARCHAR(50),
  order date DATE
);
INSERT INTO festival days VALUES
('2025-10-25'), ('2025-11-10'), ('2025-12-05');
INSERT INTO amazon orders festival VALUES
(701, 6301, 'Suresh', 'Sweets', '2025-10-25'),
(702, 6301, 'Suresh', 'Sweets', '2025-11-10'),
(703, 6301, 'Sweets', '2025-12-05'),
(704, 6302, 'Kavitha', 'Sweets', '2025-10-25'),
(705, 6302, 'Kavitha', 'Snacks', '2025-11-10');
```

Solution (MySQL)

SELECT customer_id, customer_name
FROM amazon_orders_festival
WHERE order_date IN (SELECT festival_date FROM festival_days)
GROUP BY customer_id, customer_name
HAVING SUM(product category != 'Sweets') = 0;

👸 Explanation (Tanglish)

- **festival_days:** Festival dates maintain panna table.
- amazon_orders_festival: Customer order data with category maintain pannrom.
- WHERE order_date IN (festival_date): Festival days la orders filter pannrom.
- **GROUP BY customer_id, customer_name:** Customer wise group pannrom.
- HAVING SUM(product_category != 'Sweets') = 0: Festival days la sweets mattum than order pannina customers filter pannrom.

Eg: Suresh ellaa festival days la sweets mattum order pannirukkanga **☑**, Kavitha oru festival la snacks order pannirukkanga **∑**.

Use Case Value (Tanglish)

Amazon and Gowtham can use this to identify **sweet loyalists for festival targeted sweet box campaigns**.

Problem 55: Swiggy – Orders Placed During Curfew Periods

Question (Tanglish)

Gowtham wants to find customers who ordered during curfew periods.

Problem Statement (Tanglish)

Curfew time la order pannina Swiggy customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE curfew_periods (
  curfew date DATE
);
CREATE TABLE swiggy_orders_curfew (
  order_id INT,
  customer id INT,
  customer_name VARCHAR(50),
  order date DATE
);
INSERT INTO curfew periods VALUES
('2025-05-01'), ('2025-05-02'), ('2025-05-03');
INSERT INTO swiggy_orders_curfew VALUES
(801, 6401, 'Hari', '2025-05-01'),
(802, 6401, 'Hari', '2025-05-02'),
(803, 6401, 'Hari', '2025-05-03'),
(804, 6402, 'Anu', '2025-05-01');
```

Solution (MySQL)

SELECT customer_id, customer_name
FROM swiggy_orders_curfew
WHERE order_date IN (SELECT curfew_date FROM curfew_periods)
GROUP BY customer_id, customer_name
HAVING COUNT(DISTINCT order_date) = (SELECT COUNT(*) FROM curfew_periods);

Explanation (Tanglish)

- curfew_periods: Curfew dates maintain panna table.
- **swiggy_orders_curfew:** Orders data maintain pannrom.
- WHERE order_date IN (curfew_date): Curfew days orders filter pannrom.
- GROUP BY customer_id, customer_name: Customer wise group pannrom.

• **HAVING COUNT = total curfew days:** Ellaa curfew days la order pannina customers filter pannrom.

Eg: Hari ellaa curfew days la order pannirukkanga 🔽, Anu oru naal mattum pannirukkanga 💢.



Swiggy and Gowtham can use this to identify **essential demand customers during curfew for prioritization.**

▶ Problem 56: Swiggy – Customers Who Ordered Medicine and Food on Same Day

Question (Tanglish)

Identify customers who ordered medicine and food on the same day.

Problem Statement (Tanglish)

Oru naal la medicine-um food-um order pannina Swiggy customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE swiggy_orders_same_day (
order_id INT,
customer_id INT,
customer_name VARCHAR(50),
category VARCHAR(20),
order_date DATE
);

INSERT INTO swiggy_orders_same_day VALUES
(901, 6501, 'Manoj', 'Food', '2025-06-10'),
(902, 6501, 'Manoj', 'Medicine', '2025-06-10'),
(903, 6502, 'Revathi', 'Food', '2025-06-11');
```

Solution (MySQL)

SELECT customer id, customer name, order date

FROM swiggy_orders_same_day
WHERE category IN ('Food', 'Medicine')
GROUP BY customer_id, customer_name, order_date
HAVING COUNT(DISTINCT category) = 2;

Explanation (Tanglish)

- category IN ('Food', 'Medicine'): Food and Medicine orders filter pannrom.
- GROUP BY customer_id, customer_name, order_date: Customer and date wise group pannrom.
- **HAVING COUNT = 2:** Andha naal la rendu category um order pannina customers filter pannrom.

Eg: Manoj andha naal la food and medicine order pannirukkanga **☑**, Revathi food mattum pannirukkanga **∑**.

\sqrtarrow Use Case Value (Tanglish)

Swiggy and Gowtham can use this to identify **health-conscious multi-category users for bundle offers**.

Problem 57: Swiggy – Customers Who Cancelled Orders Due to Late Delivery

Question (Tanglish)

Find customers who cancelled orders due to late delivery.

Problem Statement (Tanglish)

Late delivery naala order cancel pannina Swiggy customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE swiggy_order_cancellations (
    order_id INT,
    customer_id INT,
    customer_name VARCHAR(50),
    cancellation_reason VARCHAR(50)
);

INSERT INTO swiggy_order_cancellations VALUES
(1001, 6601, 'Rahul', 'Late Delivery'),
(1002, 6601, 'Rahul', 'Late Delivery'),
(1003, 6602, 'Lakshmi', 'Other');
```

Solution (MySQL)

SELECT customer_id, customer_name, COUNT(*) AS late_cancellations FROM swiggy_order_cancellations
WHERE cancellation_reason = 'Late Delivery'
GROUP BY customer_id, customer_name;

Explanation (Tanglish)

- cancellation_reason = 'Late Delivery': Late delivery reason la cancel pannina orders filter pannrom.
- GROUP BY customer_id, customer_name: Customer wise group pannrom.
- COUNT: Late delivery cancellations count kaanom.

Eg: Rahul 2 late delivery cancellations pannirukkanga **∑**, Lakshmi different reason kaaga pannirukkanga **∑**.

○ Use Case Value (Tanglish)

Swiggy and Gowtham can use this to identify **logistics issues for customer compensation** and delivery improvements.

Problem 58: Amazon – Customers Who Placed Only Prepaid Orders

Question (Tanglish)

Identify customers who placed only prepaid orders.

Problem Statement (Tanglish)

Prepaid orders mattum than pottu irukkara Amazon customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE amazon_orders_payment (
order_id INT,
customer_id INT,
customer_name VARCHAR(50),
payment_type VARCHAR(20)
);

INSERT INTO amazon_orders_payment VALUES
(1101, 6701, 'Sathish', 'Prepaid'),
(1102, 6701, 'Sathish', 'Prepaid'),
(1103, 6702, 'Meera', 'Prepaid'),
(1104, 6702, 'Meera', 'COD');
```

Solution (MySQL)

SELECT customer_id, customer_name FROM amazon_orders_payment GROUP BY customer_id, customer_name HAVING SUM(payment_type != 'Prepaid') = 0;

Explanation (Tanglish)

• payment_type != 'Prepaid': COD or other payment types check pannrom.

• **SUM = 0:** Prepaid mattum than irukka nu verify pannrom.

Eg: Sathish prepaid orders mattum pannirukkanga <a>
▼, Meera COD um pottirukkanga <a>
▼.

💰 Use Case Value (Tanglish)

Amazon and Gowtham can use this to identify **prepaid loyal customers for reward offers and fast processing.**

Problem 59: Swiggy – Customers Who Ordered from High-Rated Restaurants Only

Question (Tanglish)

Find customers who ordered from high-rated restaurants only.

Problem Statement (Tanglish)

High-rated restaurants la mattum order pannina Swiggy customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE swiggy_restaurant_ratings (
    restaurant_id INT,
    restaurant_name VARCHAR(50),
    rating DECIMAL(2,1)
);

CREATE TABLE swiggy_orders_restaurants (
    order_id INT,
    customer_id INT,
    customer_name VARCHAR(50),
    restaurant_id INT
);

INSERT INTO swiggy_restaurant_ratings VALUES
(201, 'Annapoorna', 4.5),
(202, 'QuickBites', 3.8);
```

INSERT INTO swiggy_orders_restaurants VALUES (1201, 6801, 'Ravi', 201), (1202, 6801, 'Ravi', 201), (1203, 6802, 'Divya', 202);

Solution (MySQL)

SELECT o.customer_id, o.customer_name FROM swiggy_orders_restaurants o JOIN swiggy_restaurant_ratings r ON o.restaurant_id = r.restaurant_id GROUP BY o.customer id, o.customer name HAVING SUM(r.rating < 4.0) = 0;

Explanation (Tanglish)

- **JOIN:** Orders table and restaurant ratings table join pannrom.
- r.rating < 4.0: 4 rating kuda keela irundha restaurants eduththu filter pannrom.
- **SUM = 0:** High-rated restaurants la mattum than irukka nu check pannrom.

Eg: Ravi high-rated restaurant la mattum order pannirukkanga , Divya low-rated la order pannirukkanga X.

Use Case Value (Tanglish)

Swiggy and Gowtham can use this to identify premium food customers for exclusive premium offers.

🎉 Problem 60: Swiggy – Customers Who Placed Bulk **Orders for Parties**

Question (Tanglish)

Gowtham wants to find customers who placed bulk orders for parties.

Problem Statement (Tanglish)

Swiggy-la party ku bulk orders pannina customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE swiggy_bulk_party_orders (
    order_id INT,
    customer_id INT,
    customer_name VARCHAR(50),
    quantity INT,
    order_date DATE
);

INSERT INTO swiggy_bulk_party_orders VALUES
(1301, 6901, 'Vikram', 25, '2025-06-10'),
(1302, 6901, 'Vikram', 30, '2025-06-15'),
(1303, 6902, 'Keerthi', 8, '2025-06-12');
```

Solution (MySQL)

SELECT customer_id, customer_name, COUNT(*) AS party_bulk_orders FROM swiggy_bulk_party_orders WHERE quantity >= 20 GROUP BY customer_id, customer_name;

Explanation (Tanglish)

- quantity >= 20: 20 items mela order pannina records filter pannrom.
- GROUP BY customer_id, customer_name: Customer wise group pannrom.
- COUNT: Party bulk orders count kaanom.

Eg: Vikram 2 bulk orders pannirukkanga <a>
▼, Keerthi quantity kammiya irukku <a>
X.

🎉 Use Case Value (Tanglish)

Swiggy and Gowtham can use this to identify party order customers for special catering offers.

✓ Problem 61: Amazon – Customers Who Ordered Electronics During Sale Days

₩ Question (Tanglish)

Find customers who ordered electronics during sale days.

Problem Statement (Tanglish)

Sale days la electronics order pannina Amazon customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE sale_days (
  sale_date DATE
);
CREATE TABLE amazon_orders sale (
  order id INT,
  customer id INT,
  customer_name VARCHAR(50),
  category VARCHAR(50),
  order date DATE
);
INSERT INTO sale days VALUES
('2025-07-01'), ('2025-07-05');
INSERT INTO amazon orders sale VALUES
(1401, 7001, 'Aravind', 'Electronics', '2025-07-01'),
(1402, 7002, 'Deepa', 'Clothing', '2025-07-01'),
(1403, 7001, 'Aravind', 'Electronics', '2025-07-05');
```

Solution (MySQL)

SELECT customer_id, customer_name, COUNT(*) AS electronics_sale_orders
FROM amazon_orders_sale
WHERE category = 'Electronics' AND order_date IN (SELECT sale_date FROM sale_days)
GROUP BY customer id, customer name;

🏿 Explanation (Tanglish)

- category = 'Electronics': Electronics orders mattum filter pannrom.
- order_date IN (sale_date): Sale days la irukkara orders filter pannrom.
- GROUP BY customer_id, customer_name: Customer wise group pannrom.

Eg: Aravind 2 sale day electronics orders pannirukkanga . Deepa electronics vaangala X.

✓ Use Case Value (Tanglish)

Amazon and Gowtham can use this to identify **electronics sale day buyers for exclusive flash deals.**

Question (Tanglish)

Find customers who watched music concerts on Netflix.

Problem Statement (Tanglish)

Netflix-la music concert content watch pannina users identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE netflix_concert_watch (
   watch_id INT,
   user_id INT,
   user_name VARCHAR(50),
   content_type VARCHAR(50),
   watch_date DATE
);

INSERT INTO netflix_concert_watch VALUES
(1501, 7101, 'Senthil', 'Music Concert', '2025-06-01'),
(1502, 7102, 'Anitha', 'Movie', '2025-06-02'),
```

(1503, 7101, 'Senthil', 'Music Concert', '2025-06-05');

Solution (MySQL)

SELECT user id, user name, COUNT(*) AS concert views FROM netflix_concert_watch WHERE content type = 'Music Concert' GROUP BY user_id, user_name;

Explanation (Tanglish)

- content_type = 'Music Concert': Music concert content watch pannina records filter pannrom.
- **GROUP BY user_id**, **user_name**: User wise group pannrom.
- COUNT: Concert views count kaanom.

Eg: Senthil 2 music concerts watch pannirukkanga , Anitha movie mattum watch pannirukkanga X.

Use Case Value (Tanglish)

Netflix and Gowtham can use this to identify music content lovers for concert recommendations.

💼 Problem 63: Amazon – Customers Who Purchased Only Branded Products for a Year

Question (Tanglish)

Find customers who purchased only branded products for a year.

Problem Statement (Tanglish)

1 year kuLLa branded products mattum than purchase pannina Amazon customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE amazon_orders_brand (
order_id INT,
customer_id INT,
customer_name VARCHAR(50),
is_branded BOOLEAN,
order_date DATE
);

INSERT INTO amazon_orders_brand VALUES
(1601, 7201, 'Gowtham', TRUE, '2024-09-10'),
(1602, 7201, 'Gowtham', TRUE, '2025-01-15'),
(1603, 7202, 'Lavanya', TRUE, '2025-03-20'),
(1604, 7202, 'Lavanya', FALSE, '2025-04-18');
```

Solution (MySQL)

SELECT customer_id, customer_name
FROM amazon_orders_brand
WHERE order_date >= DATE_SUB(CURDATE(), INTERVAL 1 YEAR)
GROUP BY customer_id, customer_name
HAVING SUM(is_branded = FALSE) = 0;

Explanation (Tanglish)

- order_date >= last 1 year: Last 1 year data filter pannrom.
- is branded = FALSE: Non-branded products check pannrom.
- **SUM = 0:** Non-branded purchase pannatha customers filter pannrom.

Eg: Gowtham branded products mattum purchase pannirukkanga **☑**, Lavanya branded illa oru product purchase pannirukkanga **∑**.

Tanglish)

Amazon and Gowtham can use this to identify **branded product loyal customers for premium campaign offers.**

Problem 64: Amazon – Customers Who Did Gift Purchases Frequently

★ Question (Tanglish)

Identify customers who did gift purchases frequently.

Problem Statement (Tanglish)

Gift purchases 5 times mela pannina Amazon customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE amazon_gift_orders (
    order_id INT,
    customer_id INT,
    customer_name VARCHAR(50),
    is_gift BOOLEAN,
    order_date DATE
);

INSERT INTO amazon_gift_orders VALUES
(1701, 7301, 'Gowtham', TRUE, '2025-02-10'),
(1702, 7301, 'Gowtham', TRUE, '2025-03-12'),
(1703, 7301, 'Gowtham', TRUE, '2025-04-15'),
(1704, 7301, 'Gowtham', TRUE, '2025-05-18'),
(1705, 7301, 'Gowtham', TRUE, '2025-06-20'),
(1706, 7301, 'Gowtham', TRUE, '2025-07-01'),
(1707, 7302, 'Ravi', TRUE, '2025-06-10');
```

Solution (MySQL)

```
SELECT customer_id, customer_name, COUNT(*) AS gift_count FROM amazon_gift_orders WHERE is_gift = TRUE GROUP BY customer_id, customer_name HAVING gift_count > 5;
```

Explanation (Tanglish)

- is_gift = TRUE: Gift ah order panninathu filter pannrom.
- **COUNT > 5:** 5 times mela gift purchase pannina customers filter pannrom.

Eg: Gowtham 6 times gift order pannirukkanga V, Ravi 1 time mattum pannirukkanga X.

1 Use Case Value (Tanglish)

Amazon and Gowtham can use this to identify **gift loyal customers for festival and birthday campaigns**.

Problem 65: Amazon – Customers Who Purchased During Flash Sales

Question (Tanglish)

Gowtham wants to find customers who purchased during flash sales.

Problem Statement (Tanglish)

Flash sales time la purchase pannina Amazon customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE flash_sale_days (
    sale_date DATE
);

CREATE TABLE amazon_flash_orders (
    order_id_INT,
```

```
customer_id INT,
    customer_name VARCHAR(50),
    order_date DATE
);

INSERT INTO flash_sale_days VALUES
('2025-07-05'), ('2025-07-15');

INSERT INTO amazon_flash_orders VALUES
(1801, 7401, 'Karthik', '2025-07-05'),
(1802, 7401, 'Karthik', '2025-07-15'),
(1803, 7402, 'Sahana', '2025-07-05');
```

Solution (MySQL)

SELECT customer_id, customer_name, COUNT(*) AS flash_sale_orders FROM amazon_flash_orders WHERE order_date IN (SELECT sale_date FROM flash_sale_days) GROUP BY customer_id, customer_name;

Explanation (Tanglish)

- order_date IN sale days: Flash sale days la orders filter pannrom.
- **COUNT:** Flash sale la eduththa orders count kaanom.

Eg: Karthik 2 flash sale orders pannirukkanga <a>V, Sahana 1 order pannirukkanga

✓ Use Case Value (Tanglish)

Amazon and Gowtham can use this to identify flash sale participants for exclusive early bird offers.

Problem 66: Amazon – Customers Who Bought Products Only in Offers



Identify customers who bought products only in offers.

Problem Statement (Tanglish)

Offer time la mattum than purchase pannina Amazon customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE amazon_offer_orders (
order_id INT,
customer_id INT,
customer_name VARCHAR(50),
is_offer BOOLEAN,
order_date DATE
);

INSERT INTO amazon_offer_orders VALUES
(1901, 7501, 'Gowtham', TRUE, '2025-03-15'),
(1902, 7501, 'Gowtham', TRUE, '2025-04-20'),
(1903, 7502, 'Divya', TRUE, '2025-05-10'),
(1904, 7502, 'Divya', FALSE, '2025-06-15');
```

Solution (MySQL)

SELECT customer_id, customer_name FROM amazon_offer_orders GROUP BY customer_id, customer_name HAVING SUM(is_offer = FALSE) = 0;

Explanation (Tanglish)

- **is_offer = FALSE:** Offer illa purchases irukka check pannrom.
- **SUM = 0:** Offer illa purchase pannatha customers filter pannrom.

Eg: Gowtham offer time la mattum purchase pannirukkanga \boxed{V} , Divya offer illa oru order pannirukkanga \boxed{X} .

💸 Use Case Value (Tanglish)

Amazon and Gowtham can use this to identify deal hunters for targeted deal notifications.

Problem 67: Amazon – Customers Who Purchased During Midnight Offers

Question (Tanglish)

Find customers who purchased during midnight offers.

Problem Statement (Tanglish)

Midnight (12 AM - 2 AM) offer la purchase pannina Amazon customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE amazon_midnight_orders (
order_id INT,
customer_id INT,
customer_name VARCHAR(50),
order_time TIME,
order_date DATE
);

INSERT INTO amazon_midnight_orders VALUES
(2001, 7601, 'Gowtham', '00:15:00', '2025-07-20'),
(2002, 7601, 'Gowtham', '01:30:00', '2025-07-22'),
(2003, 7602, 'Meera', '23:50:00', '2025-07-21');
```

Solution (MySQL)

SELECT customer_id, customer_name, COUNT(*) AS midnight_orders FROM amazon_midnight_orders WHERE TIME(order_time) BETWEEN '00:00:00' AND '02:00:00' GROUP BY customer_id, customer_name;

Explanation (Tanglish)

TIME(order_time) BETWEEN 12 AM - 2 AM: Midnight orders filter pannrom.

• **COUNT:** Midnight orders count kaanom.

Eg: Gowtham 2 midnight orders pannirukkanga **☑**, Meera night la pannirukkanga aana midnight illa **∑**.



Amazon and Gowtham can use this to identify **night shoppers for midnight flash sale campaigns**.

Problem 68: Amazon – Customers Who Purchased Mobile and Accessories Together

Question (Tanglish)

Gowtham wants to identify customers who purchased mobile and accessories together.

Problem Statement (Tanglish)

Oru naal la mobile-um accessories-um purchase pannina Amazon customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE amazon_mobile_accessories_orders (
    order_id INT,
    customer_id INT,
    customer_name VARCHAR(50),
    category VARCHAR(50),
    order_date DATE
);

INSERT INTO amazon_mobile_accessories_orders VALUES
(2101, 7701, 'Karthik', 'Mobile', '2025-06-15'),
(2102, 7701, 'Karthik', 'Accessories', '2025-06-15'),
(2103, 7702, 'Sneha', 'Mobile', '2025-06-16');
```

💡 Solution (MySQL)

SELECT customer_id, customer_name, order_date FROM amazon_mobile_accessories_orders WHERE category IN ('Mobile', 'Accessories') GROUP BY customer_id, customer_name, order_date HAVING COUNT(DISTINCT category) = 2;

is Explanation (Tanglish)

- category IN ('Mobile','Accessories'): Mobile and accessories categories filter pannrom.
- GROUP BY customer_id, customer_name, order_date: Customer and date wise group pannrom.
- HAVING COUNT = 2: Andha naal la rendu category um purchase pannina customers filter pannrom.

Eg: Karthik same day la mobile and accessories vaangirukkanga ✓, Sneha mobile mattum vaangirukkanga X.

Use Case Value (Tanglish)

Amazon and Gowtham can use this to identify bundle buyers for combo offers.

Problem 69: Amazon – Customers Who Placed Return Requests Immediately After Delivery

Question (Tanglish)

Identify customers who placed return requests immediately after delivery.

Problem Statement (Tanglish)

Delivery aana adutha naal immediate-a return request potta customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

CREATE TABLE amazon_returns (

```
return_id INT,
customer_id INT,
customer_name VARCHAR(50),
delivery_date DATE,
return_request_date DATE
);

INSERT INTO amazon_returns VALUES
(2201, 7801, 'Arjun', '2025-07-01', '2025-07-02'),
(2202, 7802, 'Divya', '2025-07-01', '2025-07-05');
```

Solution (MySQL)

SELECT customer_id, customer_name, COUNT(*) AS immediate_returns FROM amazon_returns
WHERE DATEDIFF(return_request_date, delivery_date) = 1
GROUP BY customer_id, customer_name;

Explanation (Tanglish)

- **DATEDIFF = 1:** Delivery date ku adutha naal immediate-a return request potta customers filter pannrom.
- COUNT: Immediate returns count kaanom.

Eg: Arjun immediate return pannirukkanga ✓, Divya 4 naal ku apram return request pannirukkanga X.

Use Case Value (Tanglish)

Amazon and Gowtham can use this to identify **frequent immediate return customers for quality analysis and fraud checks**.

Problem 70: Amazon – Customers Who Used EMI for All Purchases

Question (Tanglish)

Gowtham wants to identify customers who used **EMI for all their purchases**.

Problem Statement (Tanglish)

EMI option use pannitu mattum than purchase pannina Amazon customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE amazon_emi_orders (
    order_id INT,
    customer_id INT,
    customer_name VARCHAR(50),
    payment_mode VARCHAR(20),
    order_date DATE
);

INSERT INTO amazon_emi_orders VALUES
(2301, 7901, 'Gowtham', 'EMI', '2025-02-01'),
(2302, 7901, 'Gowtham', 'EMI', '2025-04-15'),
(2303, 7902, 'Nisha', 'COD', '2025-03-20');
```

Solution (MySQL)

SELECT customer_id, customer_name FROM amazon_emi_orders GROUP BY customer_id, customer_name HAVING SUM(payment_mode != 'EMI') = 0;

Explanation (Tanglish)

- payment_mode != 'EMI': EMI illa purchases check pannrom.
- **SUM = 0**: EMI illa purchase pannatha customers filter pannrom.

Eg: Gowtham EMI la mattum purchase pannirukkanga V, Nisha COD use pannirukkanga X.

Use Case Value (Tanglish)

Amazon and Gowtham can use this to identify **EMI dependent customers for no-cost EMI promotions and upsell campaigns.**

Note: Problem 71: Identify Users Who Created Multiple Accounts Using the Same IP

★ Question (Tanglish)

Gowtham wants to find users who created multiple accounts using the same IP address.

Problem Statement (Tanglish)

Oru IP address la multiple accounts create pannina users identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE user_accounts (
    user_id INT,
    user_name VARCHAR(50),
    ip_address VARCHAR(50),
    created_date DATE
);

INSERT INTO user_accounts VALUES
(1, 'Gowtham', '192.168.0.1', '2025-01-01'),
(2, 'Ravi', '192.168.0.1', '2025-01-02'),
(3, 'Priya', '192.168.0.2', '2025-01-03');
```

Solution (MySQL)

SELECT ip_address, COUNT(*) AS account_count FROM user_accounts GROUP BY ip_address HAVING account_count > 1;

Explanation (Tanglish)

- **GROUP BY ip_address:** IP address wise group pannrom.
- **COUNT > 1:** Oru IP la 1 mela accounts irukka nu check pannrom.

Eg: 192.168.0.1 IP la Gowtham, Ravi accounts create pannirukkanga **☑**, Priya ip la single account mattum irukku **∑**.

🕵 Use Case Value (Tanglish)

Gowtham can use this to identify potential duplicate or fraud accounts created from same IP for security checks.

Problem 72: Identify Users Who Placed and Cancelled **Orders Repeatedly**

Question (Tanglish)

Identify users who placed and cancelled orders repeatedly.

Problem Statement (Tanglish)

Repeated-a order panni cancel pannina users identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE user orders (
  order_id INT,
  user id INT,
  user_name VARCHAR(50),
  order_status VARCHAR(20)
  order date DATE
);
INSERT INTO user orders VALUES
(1, 101, 'Gowtham', 'Cancelled', '2025-01-05'),
(2, 101, 'Gowtham', 'Cancelled', '2025-01-10'),
(3, 101, 'Gowtham', 'Cancelled', '2025-01-15'),
(4, 102, 'Arun', 'Completed', '2025-01-07');
```

Solution (MySQL)

```
SELECT user id, user name, COUNT(*) AS cancel count
FROM user orders
WHERE order_status = 'Cancelled'
GROUP BY user id, user name
HAVING cancel count >= 3;
```

Explanation (Tanglish)

- WHERE order_status = 'Cancelled': Cancelled orders filter pannrom.
- GROUP BY user_id, user_name: User wise group pannrom.
- HAVING cancel_count >= 3: 3 times mela cancel pannina users identify pannrom.

Eg: Gowtham 3 times cancel pannirukkanga V, Arun cancel pannala X

Use Case Value (Tanglish)

Gowtham can use this to identify **repeat cancellation users for order policy refinement and fraud checks**.

Problem 73: Find Drivers Who Cancelled Rides at the Last Minute

★ Question (Tanglish)

Find drivers who cancelled rides at the last minute.

Problem Statement (Tanglish)

Last minute ride cancel pannina drivers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE driver_rides (
ride_id INT,
driver_id INT,
driver_name VARCHAR(50),
cancel_time_minutes_before INT,
ride_date DATE
);

INSERT INTO driver_rides VALUES
(1, 201, 'Sathish', 2, '2025-02-01'),
(2, 201, 'Sathish', 3, '2025-02-05'),
```

(3, 202, 'Kumar', 15, '2025-02-03');

Solution (MySQL)

SELECT driver_id, driver_name, COUNT(*) AS last_minute_cancels FROM driver_rides
WHERE cancel_time_minutes_before <= 5
GROUP BY driver_id, driver_name;

👸 Explanation (Tanglish)

- cancel_time_minutes_before <= 5: Last 5 mins kuLLa cancel pannina rides filter pannrom.
- **GROUP BY driver_id, driver_name:** Driver wise group pannrom.

Eg: Sathish last minute la 2 rides cancel pannirukkanga ✓, Kumar 15 mins munnaadi cancel pannirukkanga X.

≜ Use Case Value (Tanglish)

Gowtham can use this to identify last minute cancelling drivers for performance review.

Problem 74: Identify Customers Who Raised Refund Requests Frequently

Question (Tanglish)

Identify customers who raised refund requests frequently.

Problem Statement (Tanglish)

Refund requests frequent-a raise pannina customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

CREATE TABLE refund_requests (request_id INT,

```
customer_id INT,
customer_name VARCHAR(50),
request_date DATE
);
INSERT INTO refund_requests VALUES
(1, 301, 'Gowtham', '2025-03-01'),
(2, 301, 'Gowtham', '2025-03-10'),
(3, 301, 'Gowtham', '2025-03-20'),
(4, 302, 'Meena', '2025-03-05');
```

Solution (MySQL)

SELECT customer_id, customer_name, COUNT(*) AS refund_count FROM refund_requests
GROUP BY customer_id, customer_name
HAVING refund count >= 3;

is Explanation (Tanglish)

• **COUNT** >= 3: 3 times mela refund request pannina customers identify pannrom.

Eg: Gowtham 3 refund requests pannirukkanga ✓, Meena 1 request pannirukkanga X.

💸 Use Case Value (Tanglish)

Gowtham can use this to identify frequent refund seekers for policy monitoring and product quality checks.

Problem 75: Identify Users with Suspicious Login Attempts

Question (Tanglish)

Gowtham wants to identify users with suspicious login attempts.

Problem Statement (Tanglish)

Suspicious login attempts panna users identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE user_logins (
login_id INT,
user_id INT,
user_id INT,
user_name VARCHAR(50),
login_time DATETIME,
is_suspicious BOOLEAN
);

INSERT INTO user_logins VALUES
(1, 401, 'Gowtham', '2025-04-01 02:00:00', TRUE),
(2, 401, 'Gowtham', '2025-04-02 03:00:00', TRUE),
(3, 402, 'Priya', '2025-04-01 10:00:00', FALSE);
```

Solution (MySQL)

SELECT user_id, user_name, COUNT(*) AS suspicious_attempts FROM user_logins
WHERE is_suspicious = TRUE
GROUP BY user_id, user_name
HAVING suspicious_attempts >= 2;

Explanation (Tanglish)

- is_suspicious = TRUE: Suspicious login attempts filter pannrom.
- **COUNT** >= 2: 2 times mela suspicious login attempt pannina users filter pannrom.

Eg: Gowtham 2 suspicious logins pannirukkanga <a>
✓, Priya illa <a>
X.

Use Case Value (Tanglish)

Gowtham can use this to identify potential security risks for user accounts.

Problem 76: Identify Customers Who Changed Addresses Frequently

Question (Tanglish)

Find customers who changed addresses frequently.

Problem Statement (Tanglish)

Address frequent-a maathina customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE address_changes (
    change_id INT,
    customer_id INT,
    customer_name VARCHAR(50),
    address VARCHAR(100),
    change_date DATE
);

INSERT INTO address_changes VALUES
(1, 501, 'Gowtham', 'Chennai', '2025-01-01'),
(2, 501, 'Gowtham', 'Coimbatore', '2025-03-01'),
(3, 501, 'Gowtham', 'Madurai', '2025-05-01'),
(4, 502, 'Keerthi', 'Chennai', '2025-02-01');
```

Solution (MySQL)

```
SELECT customer_id, customer_name, COUNT(*) AS address_changes_count FROM address_changes
GROUP BY customer_id, customer_name
HAVING address_changes_count >= 3;
```

Explanation (Tanglish)

• **COUNT >= 3:** 3 times mela address maathina customers filter pannrom.

Eg: Gowtham 3 times address maathirukkanga ▼, Keerthi 1 time mattum maathirukkanga ×.

hate Use Case Value (Tanglish)

Gowtham can use this to identify **frequent movers for address verification and delivery risk analysis.**

Problem 77: Identify Accounts with Same Payment Method Used Across Multiple IDs

Question (Tanglish)

Find accounts where same payment method used across multiple user IDs.

Problem Statement (Tanglish)

Oru payment method multiple user IDs la use pannina accounts identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE user_payments (
   payment_id INT,
   user_id INT,
   user_name VARCHAR(50),
   payment_method VARCHAR(50),
   payment_date DATE
);

INSERT INTO user_payments VALUES
(1, 601, 'Gowtham', 'Card XXXXX1234', '2025-04-01'),
(2, 602, 'Ravi', 'Card XXXXX1234', '2025-04-02'),
(3, 603, 'Anu', 'Card XXXXX5678', '2025-04-03');
```

Solution (MySQL)

```
SELECT payment_method, COUNT(DISTINCT user_id) AS user_count FROM user_payments
GROUP BY payment_method
HAVING user_count > 1;
```

Explanation (Tanglish)

• **GROUP BY payment_method:** Payment method wise group pannrom.

• **COUNT DISTINCT user_id > 1:** Andha payment method multiple user IDs la use aagirtha nu filter pannrom.

Eg: Card XXXX1234 Gowtham and Ravi use pannirukkanga **☑**, Card XXXX5678 Anu mattum use pannirukkanga **∑**.

Use Case Value (Tanglish)

Gowtham can use this to identify **shared payment methods for fraud detection and security checks.**

Problem 78: Identify Users with Multiple Failed Payment Attempts

Question (Tanglish)

Gowtham wants to identify users with multiple failed payment attempts.

Problem Statement (Tanglish)

Multiple failed payment attempts pannina users identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE payment_attempts (
attempt_id INT,
user_id INT,
user_name VARCHAR(50),
status VARCHAR(20),
attempt_date DATE
);

INSERT INTO payment_attempts VALUES
(1, 701, 'Gowtham', 'Failed', '2025-05-01'),
(2, 701, 'Gowtham', 'Failed', '2025-05-02'),
(3, 701, 'Gowtham', 'Failed', '2025-05-03'),
(4, 702, 'Divya', 'Success', '2025-05-02');
```

SELECT user_id, user_name, COUNT(*) AS failed_attempts
FROM payment_attempts
WHERE status = 'Failed'
GROUP BY user_id, user_name
HAVING failed attempts >= 3;

🏿 Explanation (Tanglish)

- **status = 'Failed':** Failed payment attempts filter pannrom.
- **COUNT** >= 3: 3 times mela failed attempts pannina users filter pannrom.

Eg: Gowtham 3 failed attempts pannirukkanga V, Divya success attempt pannirukkanga X.

Use Case Value (Tanglish)

Gowtham can use this to identify payment issue users for alternate payment options and risk management.

Problem 79: Find Delivery Partners Who Marked Delivered but Customer Reported Missing

★ Question (Tanglish)

Find delivery partners who marked orders as delivered but customer reported missing.

Problem Statement (Tanglish)

Delivered nu mark pannitu customer "item missing" nu complain pannina delivery partners identify panna vendiyathu.

Create & Insert DDL (MySQL)

CREATE TABLE delivery_reports (
report_id INT,
delivery_partner_id INT,

```
partner_name VARCHAR(50),
status_marked VARCHAR(20),
customer_complaint VARCHAR(20),
delivery_date DATE
);

INSERT INTO delivery_reports VALUES
(1, 801, 'Suresh', 'Delivered', 'Missing', '2025-06-01'),
(2, 801, 'Suresh', 'Delivered', 'Missing', '2025-06-05'),
(3, 802, 'Raj', 'Delivered', 'Received', '2025-06-02');
```

SELECT delivery_partner_id, partner_name, COUNT(*) AS missing_reports FROM delivery_reports
WHERE status_marked = 'Delivered' AND customer_complaint = 'Missing'
GROUP BY delivery_partner_id, partner_name
HAVING missing_reports >= 2;

Explanation (Tanglish)

- WHERE Delivered and Missing: Delivered nu mark pannitu customer "missing" nu complain pannina cases filter pannrom.
- **COUNT** >= 2: 2 times mela nadandha partners filter pannrom.

Eg: Suresh 2 times nadandhurukkanga <a>
✓, Raj la illa <a>
X.



Gowtham can use this to identify high-risk delivery partners for investigation and training.

Problem 80: Identify Users Who Used Fake Promo Codes



Identify users who used fake promo codes.

Problem Statement (Tanglish)

Fake promo codes use pannina users identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE promo_code_usage (
    usage_id INT,
    user_id INT,
    user_name VARCHAR(50),
    promo_code VARCHAR(50),
    is_fake BOOLEAN,
    usage_date DATE
);

INSERT INTO promo_code_usage VALUES
(1, 901, 'Gowtham', 'FREE100', TRUE, '2025-07-01'),
(2, 901, 'Gowtham', 'SAVE50', TRUE, '2025-07-05'),
(3, 902, 'Kavi', 'WELCOME10', FALSE, '2025-07-02');
```

Solution (MySQL)

SELECT user_id, user_name, COUNT(*) AS fake_promo_usage FROM promo_code_usage WHERE is_fake = TRUE GROUP BY user_id, user_name;

Explanation (Tanglish)

- is_fake = TRUE: Fake promo code usage filter pannrom.
- **COUNT:** Fake promo code use pannina times kaanom.

Eg: Gowtham 2 fake promo codes use pannirukkanga , Kavi illa X.

Use Case Value (Tanglish)

Gowtham can use this to identify fraud promo code users for blocking or restriction.

Problem 81: Identify Customers with Consistent Purchase Patterns Month-on-Month

Question (Tanglish)

Identify customers with consistent purchase patterns month-on-month.

Problem Statement (Tanglish)

Month-on-month regular-a purchase pannina customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE monthly_purchases (
purchase_id INT,
customer_id INT,
customer_name VARCHAR(50),
purchase_date DATE
);

INSERT INTO monthly_purchases VALUES
(1, 1001, 'Gowtham', '2025-01-15'),
(2, 1001, 'Gowtham', '2025-02-15'),
(3, 1001, 'Gowtham', '2025-03-15'),
(4, 1002, 'Priya', '2025-01-20'),
(5, 1002, 'Priya', '2025-03-25');
```

Solution (MySQL)

```
SELECT customer_id, customer_name, COUNT(DISTINCT DATE_FORMAT(purchase_date, '%Y-%m')) AS active_months
FROM monthly_purchases
GROUP BY customer_id, customer_name
HAVING active_months >= 3;
```

👸 Explanation (Tanglish)

• DATE_FORMAT(purchase_date, '%Y-%m') month-wise unique purchases check pannrom.

• **COUNT** >= 3: 3 months continuous-a purchase pannina customers filter pannrom.

Eg: Gowtham 3 months consistent purchase pannirukkanga ✓, Priya 2 months la pannirukkanga ✓.



Gowtham can use this to identify loyal customers for rewards and retention plans.

Problem 82: Identify Customers with Seasonal Purchasing Behavior

Question (Tanglish)

Gowtham wants to find customers with seasonal purchasing behavior.

Problem Statement (Tanglish)

Specific seasons la than purchase panna virumbi pannina customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE seasonal_purchases (
   purchase_id INT,
   customer_id INT,
   customer_name VARCHAR(50),
   purchase_date DATE
);

INSERT INTO seasonal_purchases VALUES
(1, 1101, 'Karthik', '2025-12-15'),
(2, 1101, 'Karthik', '2024-12-20'),
(3, 1102, 'Anu', '2025-06-10');
```

Solution (MySQL)

SELECT customer_id, customer_name, COUNT(*) AS seasonal_purchases FROM seasonal_purchases WHERE MONTH(purchase_date) IN (11, 12)

GROUP BY customer_id, customer_name HAVING seasonal_purchases >= 2;

Explanation (Tanglish)

- MONTH(purchase_date) IN (11,12): Winter season la purchases filter pannrom.
- COUNT >= 2: 2 seasons la purchase pannina customers filter pannrom.

Eg: Karthik 2 winter seasons la purchase pannirukkanga **☑**, Anu summer la mattum pannirukkanga **∑**.

Use Case Value (Tanglish)

Gowtham can use this to identify seasonal buyers for targeted seasonal campaigns.

Problem 83: Find Customers Who Made Purchases on Specific Time Windows

Question (Tanglish)

Find customers who made purchases within specific time windows (e.g., 6 PM - 9 PM).

Problem Statement (Tanglish)

Specific time window la purchase pannina customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE timed_purchases (
   purchase_id INT,
   customer_id INT,
   customer_name VARCHAR(50),
   purchase_time TIME,
   purchase_date DATE
);
```

INSERT INTO timed_purchases VALUES

- (1, 1201, 'Gowtham', '18:30:00', '2025-08-01'),
- (2, 1201, 'Gowtham', '19:15:00', '2025-08-02'),
- (3, 1202, 'Anjali', '15:00:00', '2025-08-01');

SELECT customer_id, customer_name, COUNT(*) AS evening_purchases FROM timed_purchases WHERE purchase_time BETWEEN '18:00:00' AND '21:00:00' GROUP BY customer id, customer name;

is Explanation (Tanglish)

- purchase_time BETWEEN '18:00:00' AND '21:00:00': Evening time window la purchases filter pannrom.
- **COUNT:** Evening purchases count kaanom.

Eg: Gowtham evening time la 2 purchases pannirukkanga **✓**, Anjali afternoon la mattum pannirukkanga **X**.

Ö Use Case Value (Tanglish)

Gowtham can use this to identify prime time buyers for targeted push notifications.

Problem 84: Identify Customers Who Interacted with Support Frequently

Question (Tanglish)

Identify customers who interacted with customer support frequently.

Problem Statement (Tanglish)

Customer support frequent-a contact pannina customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE support_interactions (
interaction_id INT,
customer_id INT,
customer_name VARCHAR(50),
interaction_date DATE
);

INSERT INTO support_interactions VALUES
(1, 1301, 'Gowtham', '2025-07-01'),
(2, 1301, 'Gowtham', '2025-07-05'),
(3, 1301, 'Gowtham', '2025-07-10'),
(4, 1302, 'Meena', '2025-07-02');
```

SELECT customer_id, customer_name, COUNT(*) AS support_calls FROM support_interactions GROUP BY customer_id, customer_name HAVING support_calls >= 3;

Explanation (Tanglish)

• **COUNT** >= 3: 3 times mela support contact pannina customers filter pannrom.

Eg: Gowtham 3 support interactions pannirukkanga **☑**, Meena 1 interaction pannirukkanga **X**.

Tuse Case Value (Tanglish)

Gowtham can use this to identify **high-touch customers for premium support plans or issue resolution.**

Problem 85: Identify Customers with Increasing Order Value

Question (Tanglish)

Gowtham wants to find customers with increasing order value over time.

Problem Statement (Tanglish)

Order value time ku time increase aagura customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE order_values (
    order_id INT,
    customer_id INT,
    customer_name VARCHAR(50),
    order_value DECIMAL(10,2),
    order_date DATE
);

INSERT INTO order_values VALUES
(1, 1401, 'Gowtham', 500.00, '2025-06-01'),
(2, 1401, 'Gowtham', 750.00, '2025-07-01'),
(3, 1401, 'Gowtham', 1000.00, '2025-08-01'),
(4, 1402, 'Ravi', 800.00, '2025-06-05'),
(5, 1402, 'Ravi', 700.00, '2025-07-05');
```

Solution (MySQL)

SELECT customer_id, customer_name FROM order_values GROUP BY customer_id, customer_name HAVING MIN(order_value) < MAX(order_value);

Explanation (Tanglish)

 MIN(order_value) < MAX(order_value): Order value increase aagirucha nu check pannrom.

Eg: Gowtham oda order value increase aagiduchu ✓, Ravi oda decrease aagiruchu X.

💹 Use Case Value (Tanglish)

Gowtham can use this to identify **high-potential customers for premium upselling** campaigns.

Problem 86: Identify Customers with Declining Activity Over Time

Question (Tanglish)

Find customers with declining activity over time.

Problem Statement (Tanglish)

Time pogum poguthu activity kuraindha customers identify panna vendiyathu.


```
CREATE TABLE customer_activity (
    activity_id INT,
    customer_id INT,
    customer_name VARCHAR(50),
    activity_count INT,
    activity_month DATE
);

INSERT INTO customer_activity VALUES
(1, 1501, 'Gowtham', 10, '2025-05-01'),
(2, 1501, 'Gowtham', 7, '2025-06-01'),
(3, 1501, 'Gowtham', 4, '2025-07-01'),
(4, 1502, 'Kumar', 5, '2025-05-01'),
(5, 1502, 'Kumar', 7, '2025-06-01');
```

Solution (MySQL)

SELECT customer_id, customer_name FROM customer_activity GROUP BY customer_id, customer_name HAVING MIN(activity count) < MAX(activity count);

Explanation (Tanglish)

 MIN(activity_count) < MAX(activity_count): Declining activity check panna or reverse logic pottu improve panna mudiyum depending on the test.

Eg: Gowtham oda activity decrease aagiruchu V, Kumar oda increase aagiruchu X.



Gowtham can use this to identify churn risk customers for re-engagement campaigns.

Problem 87: Identify Users Dormant for 6 Months but Returned

Question (Tanglish)

Identify users who were dormant for 6 months but returned later.

Problem Statement (Tanglish)

6 months inactive irundhu apram return aana users identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE user_logins_return (
login_id INT,
user_id INT,
user_name VARCHAR(50),
login_date DATE
);

INSERT INTO user_logins_return VALUES
(1, 1601, 'Gowtham', '2024-12-01'),
(2, 1601, 'Gowtham', '2025-07-01'),
(3, 1602, 'Divya', '2025-05-01'),
(4, 1602, 'Divya', '2025-06-01');
```

💡 Solution (MySQL)

```
SELECT user_id, user_name

FROM user_logins_return

GROUP BY user_id, user_name

HAVING DATEDIFF(MAX(login_date), MIN(login_date)) >= 180;
```

B Explanation (Tanglish)

DATEDIFF >= 180: 6 months gap ku apram return aana users identify pannrom.

Eg: Gowtham 6 months gap apram return pannirukkanga **✓**, Divya regular logins pannirukkanga **X**.

Use Case Value (Tanglish)

Gowtham can use this to identify re-engaged users for welcome back offers.

Problem 88: Track Customers Who Share Referral Codes Frequently

Question (Tanglish)

Gowtham wants to track customers who share referral codes frequently.

Problem Statement (Tanglish)

Referral codes frequent-a share pannina customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE referral_shares (
share_id INT,
customer_id INT,
customer_name VARCHAR(50),
referral_code VARCHAR(20),
share_date DATE
);
```

INSERT INTO referral_shares VALUES

```
(1, 1701, 'Gowtham', 'REF123', '2025-04-01'), (2, 1701, 'Gowtham', 'REF123', '2025-04-05'), (3, 1701, 'Gowtham', 'REF123', '2025-04-10'), (4, 1702, 'Anu', 'REF456', '2025-04-03');
```

SELECT customer_id, customer_name, COUNT(*) AS share_count FROM referral_shares GROUP BY customer_id, customer_name HAVING share count >= 3;

Explanation (Tanglish)

• **COUNT** >= 3: 3 times mela referral codes share pannina customers filter pannrom.

Eg: Gowtham 3 times referral code share pannirukkanga **✓**, Anu 1 time mattum share pannirukkanga **X**.

♥ Use Case Value (Tanglish)

Gowtham can use this to identify referral champions for rewards and tier promotions.

Problem 89: Identify Customers Who Preferred Specific Payment Methods

Question (Tanglish)

Identify customers who consistently preferred a specific payment method (e.g., Credit Card).

Problem Statement (Tanglish)

Oru specific payment method mattum than use pannina customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

CREATE TABLE payment_methods (payment_id INT,

```
customer_id INT,
customer_name VARCHAR(50),
payment_method VARCHAR(50),
payment_date DATE
);

INSERT INTO payment_methods VALUES
(1, 8001, 'Gowtham', 'Credit Card', '2025-01-15'),
(2, 8001, 'Gowtham', 'Credit Card', '2025-02-20'),
(3, 8002, 'Anu', 'Debit Card', '2025-03-10'),
(4, 8002, 'Anu', 'Credit Card', '2025-03-15');
```

SELECT customer_id, customer_name
FROM payment_methods
GROUP BY customer_id, customer_name
HAVING SUM(payment_method != 'Credit Card') = 0;

Explanation (Tanglish)

- **SUM(payment_method != 'Credit Card') = 0:** Credit card illa payments irukka customers filter pannrom.
- GROUP BY customer_id, customer_name: Customer wise group pannrom.

Example: Gowtham ellam Credit Card use pannirukkanga , Anu oru Debit Card use pannirukkanga .

X Use Case Value (Tanglish)

Gowtham can use this to identify loyal payment method users for payment-specific offers.

Problem 90: Identify Customers Who Purchased High-Value Items on EMI



Find customers who purchased high-value items on EMI.

Problem Statement (Tanglish)

EMI-la high-value items (e.g., ₹50,000 mele) purchase pannina customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE emi_purchases (
   purchase_id INT,
   customer_id INT,
   customer_name VARCHAR(50),
   order_value DECIMAL(10, 2),
   payment_mode VARCHAR(20),
   purchase_date DATE
);

INSERT INTO emi_purchases VALUES
(1, 9001, 'Gowtham', 75000.00, 'EMI', '2025-06-01'),
(2, 9002, 'Kavi', 35000.00, 'EMI', '2025-06-10'),
(3, 9003, 'Ravi', 60000.00, 'Credit Card', '2025-06-15');
```

Solution (MySQL)

SELECT customer_id, customer_name FROM emi_purchases WHERE payment_mode = 'EMI' AND order_value > 50000 GROUP BY customer_id, customer_name;

Explanation (Tanglish)

- payment_mode = 'EMI' AND order_value > 50000: EMI payment and high-value order filter pannrom.
- **GROUP BY customer_id, customer_name:** Customer wise group pannrom.

Example: Gowtham ₹75,000 EMI use pannirukkanga , Kavi ₹35,000 EMI use pannirukkanga .



Gowtham can use this to identify **premium EMI customers for special EMI schemes and upsell.**

Problem 91: Gowtham Wants to Find Top 100 Spenders in Each City

Question (Tanglish)

Gowtham wants to find top 100 spenders in each city.

Problem Statement (Tanglish)

Oru city-la top 100 spending pannina customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE city_spenders (
   customer_id INT,
   customer_name VARCHAR(50),
   city VARCHAR(50),
   total_spent DECIMAL(10,2)
);
```

INSERT INTO city_spenders VALUES

- (1, 'Gowtham', 'Chennai', 50000.00),
- (2, 'Arun', 'Chennai', 45000.00),
- (3, 'Kavitha', 'Coimbatore', 60000.00),
- (4, 'Suresh', 'Chennai', 48000.00),
- (5, 'Anu', 'Coimbatore', 40000.00);

Solution (MySQL)

Explanation (Tanglish)

- ROW_NUMBER() OVER (PARTITION BY city ORDER BY total_spent DESC): City-wise ranking create pannrom.
- WHERE rn <= 100: Top 100 spenders filter pannrom.

Eg: Chennai-la Gowtham top spender-a irukkanga , city-wise top 100 kudutha output varum.

Suse Case Value (Tanglish)

Gowtham and company can use this to target **high-spending customers city-wise for premium offers and loyalty rewards**.

Problem 92: Identify Customers Who Referred Friends Frequently

Question (Tanglish)

Identify customers who referred friends frequently.

Problem Statement (Tanglish)

Frequent-a friends refer pannina customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE referral_records (
referral_id INT,
customer_id INT,
customer_name VARCHAR(50),
referred_friend_id INT,
```

```
referral_date DATE
);

INSERT INTO referral_records VALUES
(1, 1001, 'Gowtham', 2001, '2025-01-10'),
(2, 1001, 'Gowtham', 2002, '2025-02-15'),
(3, 1001, 'Gowtham', 2003, '2025-03-20'),
(4, 1002, 'Anu', 2004, '2025-02-10');
```

SELECT customer_id, customer_name, COUNT(*) AS referral_count FROM referral_records GROUP BY customer_id, customer_name HAVING referral_count >= 3;

Explanation (Tanglish)

• **COUNT** >= 3: 3 times mela friends refer pannina customers filter pannrom.

Eg: Gowtham 3 friends refer pannirukkanga V, Anu 1 friend mattum refer pannirukkanga X.

Use Case Value (Tanglish)

Gowtham can use this to identify top referrers for rewards and referral campaigns.

Problem 93: Find Users Who Churned After High Activity

Question (Tanglish)

Find users who churned (inactive) after high activity.

Problem Statement (Tanglish)

High activity panna apram churn aana users identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE user_activity (
   activity_id INT,
   user_id INT,
   user_name VARCHAR(50),
   activity_level VARCHAR(20),
   last_active_date DATE
);

INSERT INTO user_activity VALUES
(1, 3001, 'Gowtham', 'High', '2025-01-01'),
(2, 3002, 'Ravi', 'Low', '2025-06-01'),
(3, 3003, 'Sahana', 'High', '2024-09-01');
```

Solution (MySQL)

SELECT user_id, user_name
FROM user_activity
WHERE activity_level = 'High' AND last_active_date < DATE_SUB(CURDATE(), INTERVAL 3 MONTH);

Explanation (Tanglish)

- activity_level = 'High': High activity users filter pannrom.
- last_active_date < 3 months ago: 3 months inactive users filter pannrom.

Eg: Gowtham last active 6 months munnaadi, churn aagirukkanga ✓, Ravi low activity users inactive irukkanga ✓.

── Use Case Value (Tanglish)

Gowtham can use this to identify high potential churn users for re-engagement campaigns.

Adding Problems 94 and 95 inside your book document now, Gowtham:

Problem 94: Identify Customers with High Basket Size but Low Purchase Frequency

Question (Tanglish)

Identify customers who have high basket size but low purchase frequency.

Problem Statement (Tanglish)

Periya order size irundhalum, purchase frequency kuraiya irundha customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE customer_orders (
order_id INT,
customer_id INT,
customer_name VARCHAR(50),
basket_size INT,
order_date DATE
);
INSERT INTO customer_orders VALUES
(1, 4001, 'Gowtham', 15, '2025-01-01'),
(2, 4001, 'Gowtham', 20, '2025-06-01'),
(3, 4002, 'Anu', 5, '2025-02-01'),
(4, 4002, 'Anu', 6, '2025-02-15');
```

Solution (MySQL)

```
SELECT customer_id, customer_name
FROM (
    SELECT customer_id, customer_name,
        AVG(basket_size) AS avg_basket,
        COUNT(*) AS order_count
    FROM customer_orders
    GROUP BY customer_id, customer_name
) t
WHERE avg_basket >= 10 AND order_count <= 2;
```

Explanation (Tanglish)

- AVG(basket_size) >= 10: Periya order size customers filter pannrom.
- order_count <= 2: Kuraiya purchase frequency filter pannrom.

Eg: Gowtham periya basket size with low frequency V, Anu frequent but small basket size X.

The Use Case Value (Tanglish)

Gowtham can use this to identify **big spenders with infrequent purchases for targeted campaigns**.

Problem 95: Identify Customers with the Most Diverse Purchases

Question (Tanglish)

Find customers with the most diverse product categories purchased.

Problem Statement (Tanglish)

Various product categories purchase pannina customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE customer_purchases (
   purchase_id INT,
   customer_id INT,
   customer_name VARCHAR(50),
   product_category VARCHAR(50)
);

INSERT INTO customer_purchases VALUES
(1, 5001, 'Gowtham', 'Electronics'),
(2, 5001, 'Gowtham', 'Books'),
(3, 5001, 'Gowtham', 'Clothing'),
(4, 5002, 'Ravi', 'Electronics'),
(5, 5002, 'Ravi', 'Electronics');
```

SELECT customer_id, customer_name, COUNT(DISTINCT product_category) AS category_count FROM customer_purchases GROUP BY customer_id, customer_name ORDER BY category_count DESC LIMIT 10;

Explanation (Tanglish)

- COUNT(DISTINCT product_category): Product category diversity count pannrom.
- ORDER BY category_count DESC LIMIT 10: Top 10 diverse purchasers filter pannrom.

Eg: Gowtham 3 categories purchase pannirukkanga **✓**, Ravi single category mattum pannirukkanga **X**.

Use Case Value (Tanglish)

Gowtham can use this to identify **diverse shoppers for cross-selling and personalized offers**.

Problem 96: Find Customers with the Highest Return Rates

Question (Tanglish)

Find customers who have the highest product return rates.

Problem Statement (Tanglish)

Maximum product returns pannina customers identify panna vendiyathu.

X Create & Insert DDL (MySQL)

```
CREATE TABLE orders (
order_id INT,
customer_id INT,
customer_name VARCHAR(50),
is_returned BOOLEAN
);

INSERT INTO orders VALUES
(1, 6001, 'Gowtham', TRUE),
(2, 6001, 'Gowtham', TRUE),
(3, 6002, 'Anu', FALSE),
(4, 6002, 'Anu', TRUE);
```

SELECT customer_id, customer_name,
SUM(is_returned) / COUNT(*) AS return_rate
FROM orders
GROUP BY customer_id, customer_name
ORDER BY return_rate DESC
LIMIT 10;

Explanation (Tanglish)

- SUM(is_returned) / COUNT(*) return rate calculate pannrom.
- ORDER BY return rate DESC highest return rate customers top la varum.

Eg: Gowtham return rate adhigam , Anu adhigama illa X.

Use Case Value (Tanglish)

Gowtham can use this to identify **potential problem customers for quality control and targeted support**.

Problem 97: Identify Customers Who Availed Maximum Customer Support

Question (Tanglish)

Identify customers who availed maximum customer support interactions.

Problem Statement (Tanglish)

Maximum support calls pannina customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE support_calls (
    call_id INT,
    customer_id INT,
    customer_name VARCHAR(50)
);

INSERT INTO support_calls VALUES
(1, 7001, 'Gowtham'),
(2, 7001, 'Gowtham'),
(3, 7001, 'Gowtham'),
(4, 7002, 'Kavi');
```

Solution (MySQL)

SELECT customer_id, customer_name, COUNT(*) AS call_count FROM support_calls GROUP BY customer_id, customer_name ORDER BY call_count DESC LIMIT 10;

Explanation (Tanglish)

- **COUNT(*) AS call_count** customer support calls count pannrom.
- ORDER BY call_count DESC max calls panna customers top la varum.

Eg: Gowtham 3 support calls pannirukkanga ✓, Kavi 1 mattum pannirukkanga X.

Use Case Value (Tanglish)

Gowtham can use this to identify customers needing extra support for personalized service.

Adding Problems 98 and 99 inside your book now, Gowtham:

Problem 98: Gowtham Wants to Find Customers Who Did Late-Night Shopping Frequently

Question (Tanglish)

Gowtham wants to find customers who did late-night shopping frequently.

Problem Statement (Tanglish)

Raatri 10 PM appuram frequent-a shopping pannina customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE late_night_shopping (
order_id INT,
customer_id INT,
customer_name VARCHAR(50),
order_time TIME
);

INSERT INTO late_night_shopping VALUES
(1, 8001, 'Gowtham', '22:30:00'),
(2, 8001, 'Gowtham', '23:00:00'),
(3, 8001, 'Gowtham', '22:45:00'),
(4, 8002, 'Anu', '21:30:00');
```

Solution (MySQL)

```
SELECT customer_id, customer_name, COUNT(*) AS late_night_orders FROM late_night_shopping WHERE order_time >= '22:00:00' GROUP BY customer_id, customer_name HAVING late_night_orders >= 3;
```

Explanation (Tanglish)

- order_time >= '22:00:00' late night orders filter pannrom.
- **COUNT** >= **3** frequent late night shopping customers identify pannrom.

Eg: Gowtham frequent-a late night shopping pannirukkanga **✓**, Anu mattum evening time mattum pannirukkanga **X**.

Use Case Value (Tanglish)

Gowtham can use this to target late-night shoppers for special offers and notifications.

Problem 99: Identify Customers Who Placed the First Order and Never Returned

Question (Tanglish)

Identify customers who placed the first order and never returned.

Problem Statement (Tanglish)

First order pannitu marubadiyum purchase pannatha customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE customer_orders (
order_id INT,
customer_id INT,
customer_name VARCHAR(50),
order_date DATE
);

INSERT INTO customer_orders VALUES
(1, 9001, 'Gowtham', '2025-01-10'),
(2, 9002, 'Anu', '2025-02-15'),
(3, 9002, 'Anu', '2025-03-20');
```

Solution (MySQL)

SELECT customer id, customer name

FROM customer_orders
GROUP BY customer_id, customer_name
HAVING COUNT(*) = 1;

Explanation (Tanglish)

• **COUNT(*) = 1** oru order mattum pannirukkira customers identify pannrom.

Eg: Gowtham first order mattum pannirukkanga V, Anu rendu order pannirukkanga X.

X Use Case Value (Tanglish)

Gowtham can use this to identify **one-time buyers for retention campaigns**.

Adding Problem 100 inside your book now, Gowtham:

© Problem 100: Identify Customers Who Engaged in All Platform Features

Question (Tanglish)

Find customers who **engaged in all platform features** (e.g., orders, reviews, referrals, support).

Problem Statement (Tanglish)

Orders, reviews, referrals, support ellathayum use pannina customers identify panna vendiyathu.

Create & Insert DDL (MySQL)

```
CREATE TABLE customer_orders (
    customer_id INT,
    customer_name VARCHAR(50)
);

CREATE TABLE customer_reviews (
    customer_id INT,
```

```
customer_name VARCHAR(50)
);

CREATE TABLE customer_referrals (
    customer_id INT,
    customer_name VARCHAR(50)
);

CREATE TABLE customer_support (
    customer_id INT,
    customer_name VARCHAR(50)
);

INSERT INTO customer_orders VALUES (1, 'Gowtham'), (2, 'Anu'), (3, 'Ravi');
INSERT INTO customer_reviews VALUES (1, 'Gowtham'), (2, 'Anu');
INSERT INTO customer_referrals VALUES (1, 'Gowtham'), (3, 'Ravi');
INSERT INTO customer_support VALUES (1, 'Gowtham'), (2, 'Anu');
```

SELECT o.customer_id, o.customer_name
FROM customer_orders o
JOIN customer_reviews r ON o.customer_id = r.customer_id
JOIN customer_referrals f ON o.customer_id = f.customer_id
JOIN customer_support s ON o.customer_id = s.customer_id;

Explanation (Tanglish)

- JOIN ellam features tables: Orders, reviews, referrals, support ellam join pannrom.
- **JOIN filter pannum customers only:** Ella features um use pannina customers maathiri filter pannrom.

Eg: Gowtham ellam features use pannirukkanga ✓, Anu oru oru feature miss pannirukkanga ✓.

(iii) Use Case Value (Tanglish)

Gowtham can use this to identify power users for VIP treatment and special campaigns.

Final Notes and Conclusion

Dear readers.

Indha book la naan unga kitta 100 hard level SQL problems share pannirukken, ella problems-um real-world use cases la ninnum eduththu, especially FAANG, MAANG maadhiri top companies use cases pola design pannirukku.

Unga SQL skills-ai next level ku edukka, scenario-based practical problems romba

mukkiyam. Indha problems solve pannitu, neenga real-world interviews, projects, and daily tasks la nalla ready-a iruppinga.

Key Points:

- Ellam MySQL flavor la irukku, so simple-a easy-a follow panna mudiyum.
- Query explanation ellam step-by-step, query by query, easy Tanglish la irukku for better understanding.
- Company use cases la ninnu design pannirukken, so indha problems unga career growth-ku direct-a help pannum.
- Neenga oru fresher-um experience professional-um irundhaalum, indha book unga kuvara pathi cover pannirukku.
- Practice, patience, and continuous learning veendum. SQL is a vast language, but indha problems with proper explanations unga journey-a easy-a pannum.

Ungaluku Enna Panradhu?

- Intha book la irukkara problems-ai solution-um explanations-um purinjukonga.
- Practice pannunga concept clear aagum, and speed improve aagum.
- Interview prep-ku use pannunga.
- Real-world projects-ku ithai reference-a edunga.
- Social media la unga progress share pannunga idhu unga personal branding-ku help pannum.

Final Words

SQL oru **powerful tool**. Idhai master panna, neenga data world-la **valuable asset** aagiruppinga. Indha book unga **SQL mastery-ku oru solid foundation**.

Naan unga success-ku wish pannuren! Edhaavadhu doubts irundhaal, illa next topics venumna sollunga. Naan udane help pannaren.

Thank you so much for reading! Happy Querying!

— Gowtham

■ About the Author: Gowtham SB – Data Engineer, Educator, Creator

Gowtham is one of India's most loved **Tamil tech content creators** — known for explaining **Data Engineering, System Design, and AI** using **local analogies** that stick.

- 10+ years of experience in Big Data & Cloud
- Property Communication
 Creator of the YouTube channel: Data Engineering
- Seatured in IBM's Top Data Engineering Influencers list
- Over 2 lakh learners across YouTube, LinkedIn, and workshops

He believes tech should be taught like a conversation at a tea kada — warm, real, and unforgettable.

You can connect with him on:

- YouTube: <u>Data Engineering</u>
- Instagram: @dataengineeringtamil
- LinkedIn: https://www.linkedin.com/in/sbgowtham/
- Website https://www.dataengineeringtamil.com/
- My Books https://topmate.io/dataengineering

Thank You