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-- 1

```
SELECT cst_id, cst_name, mbr_points
FROM membership
    JOIN customer ON (
        membership.customer_cst_id = customer.cst_id
    )
WHERE
    mbr_points > 100
    AND mbr_points < 115
ORDER BY mbr_points ASC;
```

-- 2

```
SELECT * FROM transaction WHERE `tr_paymentMethod` = 'cash';
```

-- 3

```
SELECT cst_id, AVG(tr_totalBill) AS avg_totalBill
FROM customer
    JOIN transaction ON (
        transaction.customer_cst_id = customer.cst_id
    )
GROUP BY
    cst_id
HAVING
    AVG(tr_totalBill) > 5000000;
```

-- 4

```
SELECT
    SUM(tr_totalBill) AS total_transaction,
    tr_paymentMethod
FROM transaction
```

GROUP BY

 `tr_paymentMethod`

HAVING

 `tr_paymentMethod` = 'cash';

-- 5

SELECT

 cst_name,

 cst_phoneNumber,

 mbr_email,

 COUNT(tr_id) AS number_transaction

FROM

 customer

 JOIN transaction ON (

 cst_id = transaction.customer_cst_id

)

 JOIN membership ON (

 cst_id = membership.customer_cst_id

)

GROUP BY

 cst_name,

 cst_phoneNumber,

 mbr_email

ORDER BY number_transaction DESC

LIMIT 3;

-- 6

SELECT AVG(tr_totalBill) AS avg_totalBill, cst_id

FROM customer

 JOIN transaction ON (customer_cst_id = cst_id)

GROUP BY

```
    cst_id
HAVING
    avg_totalBill > (
        SELECT avg(`tr_totalBill`)
        FROM transaction
    )
ORDER BY avg_totalBill DESC;
```

-- 7

```
SELECT
    emp_id,
    emp_name,
    MAX(
        SELECT COUNT(tr_id)
        FROM employee
            JOIN transaction ON (employee_emp_id = emp_id)
    GROUP BY
        emp_id
    ) AS number_of_transactions
FROM employee
    JOIN transaction ON (employee_emp_id = emp_id)
GROUP BY
    emp_id,
    emp_name
ORDER BY number_of_transactions DESC
LIMIT 1;
```

```
SELECT
    emp_name,
    emp_id,
    count(tr_id) AS number_of_transaction
```

```
FROM employee
    JOIN transaction ON (emp_id = employee_emp_id)
GROUP BY
    emp_id
HAVING
    number_of_transaction = (
        SELECT max(number_of_transaction)
        FROM (
            SELECT count(tr_id) AS number_of_transaction
            FROM transaction
            GROUP BY
                employee_emp_id
        ) AS subQuery
    );
```

-- 8

```
SELECT
    cst_id,
    cst_name,
    SUM(tr_totalBill) AS total_transaction_bill
FROM
    customer
    JOIN transaction ON cst_id = customer_cst_id
GROUP BY
    cst_id,
    cst_name
HAVING
    SUM(tr_totalBill) > (
        SELECT AVG(tr_totalBill)
        FROM transaction
    )
```

```
ORDER BY total_transaction_bill DESC;
```

```
-- 9
```

```
SELECT
```

```
    cst_id,
```

```
    cst_name,
```

```
    COUNT(tr_id) AS number_of_transactions
```

```
FROM customer
```

```
    JOIN transaction ON (cst_id = customer_cst_id)
```

```
GROUP BY
```

```
    cst_id
```

```
HAVING
```

```
    COUNT(tr_id) > 1;
```

```
-- 10
```

```
SELECT item_id, item_name
```

```
FROM item
```

```
WHERE
```

```
    item_id NOT IN(
```

```
        SELECT item_item_id
```

```
        FROM transaction_item
```

```
    );
```