

1. Given a table of employees, find the number of male and female employees in each department:

```
create table employees (EmpID int, Name varchar(10), gender
varchar(10), department varchar(10));

SELECT Department,
SUM(CASE WHEN Gender = 'Male' THEN 1 ELSE 0 END) AS "Num of male",
SUM(CASE WHEN Gender = 'Female' THEN 1 ELSE 0 END) AS "Num of Female"
FROM employees
GROUP BY Department;
```

2. Given a table with salaries of employees for different month, find the max amount from the rows with month name:

```
SELECT Name,
ANY_VALUE(CASE
    WHEN Jan = GREATEST(Jan, Feb, Mar) THEN 'Jan'
    WHEN Feb = GREATEST(Jan, Feb, Mar) THEN 'Feb'
    WHEN Mar = GREATEST(Jan, Feb, Mar) THEN 'Mar'
END) AS Month,
GREATEST(Jan, Feb, Mar) AS Value
FROM emp_salary
```

3. Given the marks obtained by candidates in a test, rank them in proper order

```
SELECT Marks,
DENSE_RANK() OVER (ORDER BY Marks DESC) AS `Ranking`,
GROUP_CONCAT(Candidate_ID ORDER BY Candidate_ID ASC) AS Candidate_ID
FROM candidate_marks
GROUP BY Marks
ORDER BY `Ranking`;
```

4. If same value is repeated for different id, then keep the value that has smallest id and delete all the other rows having same value:

```
DELETE c1
FROM candidate_emails c1
JOIN candidate_emails c2
ON c1.Email = c2.Email AND c1.Candidate_ID > c2.Candidate_ID;
```