

S06-L02 Row number

See salary of an employee with employee ID = 10004.

<http://www.postgresql.org/docs/9.4/static/functions-window.html>

```
SELECT
    `id`,
    `employee_id`,
    `salary_amount`,
    `from_date`,
    `to_date`
FROM `sample_staff`.`salary`
WHERE `salary`.`employee_id` = 10004
;
```

```
SET @row_number = 0;
SET @dummy_salary_amount = 0;
SET @dummy_employee_id = 0;

SELECT
    `id`,
    `employee_id`,
    `salary_amount`,
    `from_date`,
    `to_date`,
    IF(`salary_amount` < @dummy_salary_amount AND @dummy_salary_amount !=
0, 'lower than last', 'higher') AS comparison,
    @row_number := IF(`employee_id` != @dummy_employee_id, 1, @row_number
+ 1) AS '@row_number',
    @dummy_salary_amount := `salary_amount` AS '@dummy_salary_amount',
    @dummy_employee_id := `employee_id` AS '@dummy_employee_id'
FROM (
    SELECT
        `id`,
        `employee_id`,
        `salary_amount`,
        `from_date`,
        `to_date`
    FROM `salary`
    WHERE `salary`.`employee_id` = 10004
    ORDER BY `salary`.`from_date` ASC
) xTMP
```

Now identify average months when the salary decreases (for this particular employee).

```

SET @row_number = 0;
SET @dummy_salary_amount = 0;
SET @dummy_employee_id = 0;

SELECT
    employee_id,
    ROUND(AVG(`@row_number`), 1) AS average_month_when_salary_decreases
FROM (
    SELECT
        `id`,
        `employee_id`,
        `salary_amount`,
        `from_date`,
        `to_date`,
        IF(`salary_amount` < @dummy_salary_amount AND
@dummy_salary_amount != 0, 'lower than last', 'higher') AS comparison,
        @row_number := IF(`employee_id` != @dummy_employee_id, 1,
@row_number + 1) AS '@row_number',
        @dummy_salary_amount := `salary_amount` AS
'@dummy_salary_amount',
        @dummy_employee_id := `employee_id` AS '@dummy_employee_id'
    FROM (
        SELECT
            `id`,
            `employee_id`,
            `salary_amount`,
            `from_date`,
            `to_date`
        FROM `salary`
        WHERE `salary`.`employee_id` = 10004
        ORDER BY `salary`.`from_date` ASC
    ) xTMP
) xTMP2
WHERE 1=1
    AND comparison = 'lower than last'
GROUP BY
    employee_id

```