

# Basic SQL Part 3

## Cheat Sheet

### TRIM(str) / LTRIM(str) / RTRIM(str)

#### What it does

Remove leading and trailing spaces.

#### Query used

```
SELECT
    count( * ) AS count,
    RTRIM( Segment ) AS segtrim,
    LEFT ( order_id, 2 ) AS order_cat
FROM
    orders
GROUP BY
    segtrim,
    order_cat
```

### LEFT(str, len) / RIGHT(str, len)

#### What it does

Returns a specified number of characters from the left or right of a string.

#### Query used

```
SELECT LEFT
    ( order_id, 2 ) AS order_cat
FROM
    orders
```

### LPAD(str, len, padstr) / RPAD(str, len, padstr)

#### What it does

Pads a string with another string.

#### Query used

```
SELECT
    LPAD( zip_code, 5, '0' )
FROM
    orders
```

## SUBSTRING(str, pos, len)

### What is does

Returns a specified number of characters from a particular position of a given string.

### Query used

```
SELECT
    SUBSTRING( order_id, 4, 4 ) AS order_num
FROM
    orders
```

## LENGTH(str, pos, len)

### What is does

Returns the length of a given string.

### Query used

```
SELECT
    customer_name,
    length(customer_name)
FROM
    orders
WHERE
    length(customer_name)>20
```

## LOCATE(substr, str)

### What is does

Returns the position of the first occurrence of a string within a string.

### Query used

```
SELECT
    customer_name,
    locate( ' ', customer_name )
FROM
    orders
```

## UPPER(str)/LOWER(str)

### What is does

Converts all the characters in a string to either uppercase or lowercase characters.

### Query used

```
SELECT
    UPPER(customer_name)
FROM
    orders
```

## CONCAT(str1,str2,...)

### What is does

Used to add / join two or more strings.

### Query used

```
SELECT
    CONCAT(
        UPPER(
            LEFT ( first_name, 1 )),
        LOWER(
            substring(
                first_name,
                2,
                length( first_name ))) AS new_first
FROM
    (
        SELECT
            substr( customer_name, 1, locate( ' ', customer_name )- 1 ) AS
first_name,
            substr(
                customer_name,
                locate( ' ', customer_name )+ 1,
                length( customer_name )) AS last_name
        FROM
            orders
    ) AS NAMES
```

## CASE STATEMENTS

### What is does

Allows you to specify conditional logical statements.

### Queries used

```
SELECT
sum(quantity),
CASE
    WHEN product_name LIKE '%Xerox%' THEN 'Xerox'
    WHEN product_name LIKE '%Acme%' THEN 'Acme'
    WHEN product_name LIKE '%Avery%' THEN 'Avery'
    ELSE 'Other'
    END AS brand
FROM
    orders
group by brand

SELECT
product_name,
CASE
    WHEN profit<0 THEN 'Loss' ELSE 'No loss'
    END AS profit
FROM
    orders
```