

The AS Keyword

A concatenation results in a new column. The default column name will be the **CONCAT** function. You can assign a custom name to the resulting column using the **AS** keyword:

```
SELECT CONCAT(FirstName,', ', City) AS new_column  
FROM customers;
```

| Operator | Description |
|----------|--|
| AND | TRUE if both expressions are TRUE |
| OR | TRUE if either expression is TRUE |
| IN | TRUE if the operand is equal to one of a list of expressions |
| NOT | Returns TRUE if expression is not TRUE |

```
SELECT ID, FirstName, LastName, Age  
FROM customers  
WHERE Age >= 30 AND Age <= 40;
```

```
SELECT ID, FirstName, LastName, Salary+500 AS Salary  
FROM employees;
```

The UPPER Function

The **UPPER** function converts all letters in the specified string to uppercase.
The **LOWER** function converts the string to lowercase.

The following SQL query selects all *LastNames* as uppercase:

```
SELECT FirstName, UPPER(LastName) AS LastName  
FROM employees;
```

```
SELECT * FROM customers  
WHERE City = 'New York' OR City = 'Chicago';
```

```
SELECT * FROM customers  
WHERE City = 'New York'  
AND (Age=30 OR Age=35);
```

WHERE is used to filter records

SQRT and AVG

The **SQRT** function returns the square root of given value in the argument.

Let's calculate the square root of each Salary:

```
SELECT Salary, SQRT(Salary)  
FROM employees;
```



```
SELECT AVG(Salary) FROM employees;
```

For example, you might need to select all customers from New York, Los Angeles, and Chicago. With the **OR** condition, your SQL would look like this:

```
SELECT * FROM customers  
WHERE City = 'New York'  
OR City = 'Los Angeles'  
OR City = 'Chicago';
```

```
SELECT * FROM customers  
WHERE City IN ('New York', 'Los Angeles', 'Chicago');
```

Subqueries

A single subquery will return the same result more easily.

```
SELECT FirstName, Salary FROM employees  
WHERE Salary > (SELECT AVG(Salary) FROM employees)  
ORDER BY Salary DESC;
```

The Like Operator

The **LIKE** keyword is useful when specifying a **search condition** within your **WHERE** clause.

```
SELECT column_name(s)  
FROM table_name  
WHERE column_name LIKE pattern;
```

SQL **pattern** matching enables you to use "_" to match any single character and "%" to match an arbitrary number of characters (including zero characters).

For example, to select employees whose *FirstNames* begin with the letter **A**, you would use the following query:

```
SELECT * FROM employees  
WHERE FirstName LIKE 'A%';
```

```
SELECT * FROM customers  
WHERE City NOT IN ('New York', 'Los Angeles', 'Chicago');
```

The CONCAT Function

The **CONCAT** function is used to concatenate two or more text values and returns the concatenating string.

Let's concatenate the *FirstName* with the *City*, separating them with a *comma*:

```
SELECT CONCAT(FirstName, ', ' , City) FROM customers;
```

```
SELECT ID, FirstName, LastName, City  
FROM customers  
WHERE City = 'New York';
```





```
SELECT column_name(s)  
FROM table_name  
WHERE column_name BETWEEN value1 AND value2;
```

| Operator | Description |
|----------|----------------------------|
| = | Equal |
| != | Not equal |
| > | Greater than |
| < | Less than |
| >= | Greater than or equal |
| <= | Less than or equal |
| BETWEEN | Between an inclusive range |





With [macOS Mojave](#), press Shift-Command (⌘)-5 on your keyboard to see all the controls you need to capture still images and record video of your screen. Use these onscreen controls to select whether to [capture the entire screen](#), [capture a window](#), [capture a selected portion](#), or [record a video](#) of the screen. (To [capture the Touch Bar](#), continue to use Shift-Command-6.)

Capture the entire screen

1. Click  in the onscreen controls. Your pointer changes to a camera .
2. Click any screen to capture that screen, or click Capture in the onscreen controls.
3. Use the thumbnail to [markup](#), [share](#), [save](#), or [take other actions](#).

Capture a window

1. Click  in the onscreen controls. Your pointer changes to a camera .
2. Click a window to capture that window.

