**SQL** (DAY2)

## SELECT TOP:-

The SELECT TOP clause is used to specify the number of records to return.

The SELECT TOP clause is useful on large tables with thousands of records. Returning a large number of records can impact performance.

## SELECT TOP number|*percent* column\_name(s) FROM table\_nameWHERE condition;

## SELECT TOP 3 \* FROM Customers;

## The above SQL statement selects the first three records from the "Customers" table

## SELECT \* FROM Customers LIMIT 3;

## The SQL statement shows the equivalent example for MySQL:

## SELECT TOP 50 PERCENT \* FROM Customers;

## The above SQL statement selects the first 50% of the records from the "Customers" table

### **COUNT() Syntax**

The COUNT() function returns the number of rows that matches a specified criterion.

SELECT COUNT(column\_name)  
FROM table\_name  
WHERE condition;

SELECT COUNT(ProductID)

FROM Products

where ProductID=6

### **AVG() Syntax**

The AVG() function returns the average value of a numeric column.

SELECT AVG(column\_name)  
FROM table\_name  
WHERE condition;

### **SUM() Syntax**

The SUM() function returns the total sum of a numeric column.

SELECT SUM(column\_name)  
FROM table\_name  
WHERE condition;

## SQL LIKE

The LIKE operator is used in a WHERE clause to search for a specified pattern in a column.

There are two wildcards often used in conjunction with the LIKE operator:

* The percent sign (%) represents zero, one, or multiple characters
* The underscore sign (\_) represents one, single character

SELECT column1, column2, ...  
FROM table\_name  
WHERE columnN LIKE pattern

|  |  |
| --- | --- |
| **LIKE Operator** | **Description** |
| WHERE CustomerName LIKE 'a%' | Finds any values that start with "a" |
| WHERE CustomerName LIKE '%a' | Finds any values that end with "a" |
| WHERE CustomerName LIKE '%or%' | Finds any values that have "or" in any position |
| WHERE CustomerName LIKE '\_r%' | Finds any values that have "r" in the second position |
| WHERE CustomerName LIKE 'a\_%' | Finds any values that start with "a" and are at least 2 characters in length |
| WHERE CustomerName LIKE 'a\_\_%' | Finds any values that start with "a" and are at least 3 characters in length |
| WHERE ContactName LIKE 'a%o' | Finds any values that start with "a" and ends with"o" |

## SELECT \* FROM Customers WHERE CustomerName LIKE 'a%';---  CustomerName starting with "a":

## SELECT \* FROM Customers WHERE CustomerName LIKE '%a';--- CustomerName ending with "a":

## SELECT \* FROM Customers WHERE CustomerName LIKE '%or%';--- CustomerName that have "or" in any position:

## SELECT \* FROM Customers WHERE CustomerName LIKE '\_r%';--- CustomerName that have "r" in the second position:

SELECT \* FROM Customers  
WHERE CustomerName LIKE 'a\_\_%';--- CustomerName that starts with "a" and are at least 3 characters in length

SELECT \* FROM Customers  
WHERE ContactName LIKE 'a%o';--- ContactName that starts with "a" and ends with "o":

SELECT \* FROM Customers  
WHERE CustomerName NOT LIKE 'a%';--- CustomerName that does NOT start with "a"

## SQL JOIN:-

## A JOIN clause is used to combine rows from two or more tables, based on a related column between them.