



DML – Select Statement

In this session, you will learn:

- How to specify condition using WHERE Clause
- Types of condition



WHERE Clause

- Used to specify condition while retrieving data from table.

Syntax

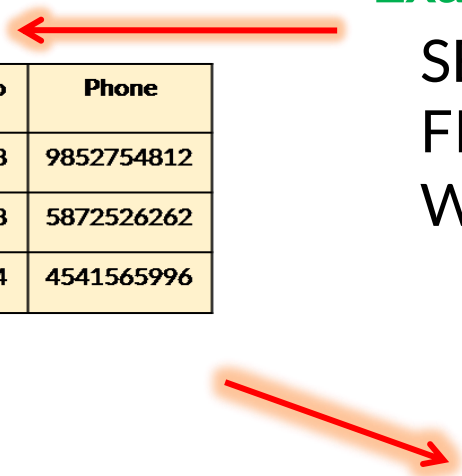
SELECT <column_list> FROM < table name > WHERE
<condition>;

Example

```
SELECT FirstName  
FROM Customer  
WHERE Customer_Id = 101;
```

Customer

Customer_Id	FirstName	Street	City	Zip_Co de	Phone
100	ABC	Central	Chennai	641088	9852754812
101	XYZ	Velacherry	Chennai	641088	5872526262
103	FEG	Lakeview	Ooty	465424	4541565996

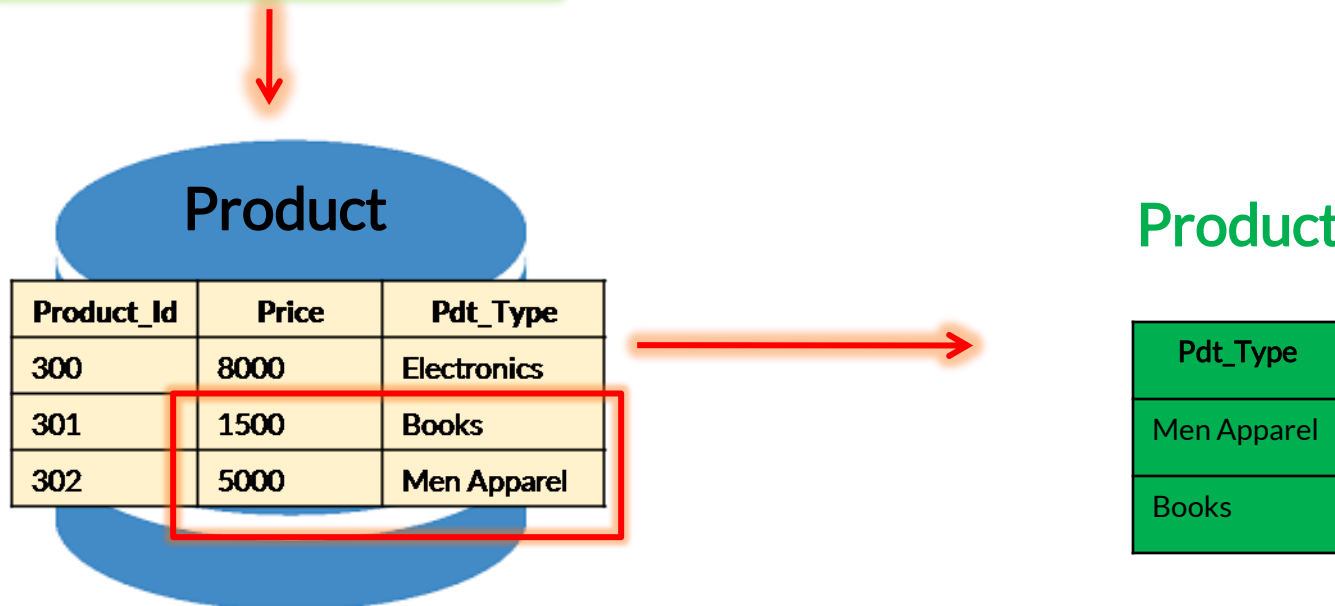


FirstName
XYZ

WHERE clause using comparison conditions

Example


```
SELECT Pdt_Type from Product WHERE Price <= 5000  
order by Price desc;
```



WHERE clause using expression

Example

```
SELECT Product_Id, Price, Pdt_Type, (Price - (Price*0.10))  
from Product WHERE (Price - (Price*0.10)) < 5000;
```



Product

Product_Id	Price	Pdt_Type
300	8000	Electronics
301	1500	Books
302	5000	Men Apparel

7200
1350
4500

Product

Product_I d	Price	Pdt_Type	(Price - (price*0.10))
301	1500	Books	1350
302	5000	Men Apparel	4500

Using Column Aliases(AS)

Example

```
SELECT Product_Id, Price, Pdt_Type,  
(Price - (Price*0.10)) AS Price_After_Discount  
from Product WHERE (Price - (Price*0.10)) < 5000;
```



Product

Product_Id	Price	Pdt_Type
300	8000	Electronics
301	1500	Books
302	5000	Men Apparel



Product

Product_I d	Quantity	Pdt_Type	Price_After_ Discount
301	1500	Books	1350
302	5000	Men Apparel	4500

WHERE clause using BETWEEN condition

Example

```
SELECT Pdt_Type from Product  
WHERE Price BETWEEN 1000 and 5000
```



Product

Product_Id	Price	Pdt_Type
300	8000	Electronics
301	1500	Books
302	5000	Men Apparel



Product

Pdt_Type
Books
Men Apparel

WHERE clause using IN condition

Example

```
SELECT FirstName from Customer  
WHERE City IN ('Chennai','CBE')
```



Customer

Customer_Id	FirstName	Street	City	Zip_Code	Phone
100	ABC	Central	Chennai	641088	9852754812
101	XYZ	Velacherry	Chennai	641088	5872526262
103	FEG	Lakeview	Ooty	465424	4541565996
102	PQR	PNP	CBE	641323	8893992919
106	MNO	Electronic	Bangalore	666743	8173578292



Customer

FirstName
ABC
XYZ
PQR

WHERE clause using LIKE condition



Wildcard operators

Percent sign(%) : represents zero, one or more than one character.

Underscore sign(_) : represents only one character.

Syntax

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

WHERE clause using LIKE condition

Example

```
SELECT FirstName from Customer  
WHERE FirstName LIKE 'A%a'
```

Customer

Customer_Id	FirstName	Street	City	Zip_Code	Phone
100	Arun	Central	Chennai	641088	9852754812
101	Meena	Velacherry	Chennai	641088	5872526262
103	Anu	Lakeview	Ooty	465424	4541565996
102	Karthi	PNP	CBE	641323	8893992919
106	Ananya	Electronic	Bangalore	666743	8173578292

Customer

FirstName
Ananya

WHERE clause using REGEXP_LIKE condition

Syntax

SELECT column_name(s) FROM table_name WHERE column_name REGEXP_LIKE (expression, pattern [, match_parameter])

Example

SELECT FirstName from Customer
WHERE FirstName REGEXP_LIKE (FirstName, 'Ar(o|u|a)n');



Customer

Customer_Id	FirstName	Street	City	Zip_Code	Phone
100	Arun	Central	Chennai	641088	9852754812
101	Meena	Velacherry	Chennai	641088	5872526262
103	Aran	Lakeview	Ooty	465424	4541565596
104	Anu	Lakeview	Ooty	465424	8482927482

The Pipe operator (|) is used to specify alternative matches



Customer

FirstName
Arun
Aran

```
SELECT FirstName from Customer WHERE FirstName REGEXP_LIKE  
(FirstName, '([aeiou])\1', 'i');
```

FirstName

Meena

'([aeiou])\1': This is the regular expression pattern being used for matching.


\1: This is a backreference to the first capturing group. It matches the same text as most recently matched by the 1st capturing group, essentially requiring the same vowel to appear consecutively.

'i': This is an optional parameter indicating the match should be case-insensitive.

WHERE clause using NULL condition

Example


```
SELECT Order_Id, Pdt_Id, Quantity from Product_Orders  
WHERE Discount IS NULL
```



Product_Orders

Order_Id	Pdt_Id	Quantity	Discount
200	300	1	null
200	301	5	0.10
201	301	2	0.12

Product_Orders



Order_Id	Pdt_Id	Quantity
200	300	1

WHERE clause using Logical condition

Example using AND Operator

```
SELECT FirstName from Customer  
WHERE FirstName LIKE 'A%' AND City = 'Chennai'
```

Customer

Customer_Id	FirstName	Street	City	Zip_Code	Phone
100	Arun	Central	Chennai	641088	9852754812
101	Meena	Velacherry	Chennai	641088	5872526262
103	Anu	Lakeview	Ooty	465424	4541565996
102	Karthi	PNP	CBE	641323	8893992919
106	Ananya	Electronic	Bangalore	666743	8173578292

Customer

FirstName
Arun

WHERE clause using Logical condition

Example using OR Operator

```
SELECT FirstName from Customer  
WHERE FirstName LIKE 'A%' OR City = 'Chennai'
```

Customer

Customer_Id	FirstName	Street	City	Zip_Code	Phone
100	Arun	Central	Chennai	641088	9852754812
101	Meena	Velacherry	Chennai	641088	5872526262
103	Anu	Lakeview	Ooty	465424	4541565996
102	Karthi	PNP	CBE	641323	8893992919
106	Ananya	Electronic	Bangalore	666743	8173578292

Customer

FirstName
Arun
Meena
Anu
Ananya

WHERE clause using Logical condition

Example using NOT Operator

```
SELECT FirstName from Customer  
WHERE City NOT IN ('Chennai','CBE')
```

Customer

Customer_Id	FirstName	Street	City	Zip_Code	Phone
100	Arun	Central	Chennai	641088	9852754812
101	Meena	Velacherry	Chennai	641088	5872526262
103	Anu	Lakeview	Ooty	465424	4541565996
102	Karthi	PNP	CBE	641323	8893992919
106	Ananya	Electronic	Bangalore	666743	8173578292

Customer

FirstName
Anu
Ananya

THANKS

