1. Restricting data with where clause

**Relational Operators:**

1. >
2. >=
3. <
4. <=
5. =
6. != or <> or ^= (For Not Equal To)

**Logical Operators**

1. AND
2. OR
3. NOT
4. AND operator will check conditions in combination

select \* from emp

where job = 'CLERK' AND sal < 1000

1. OR operator will check conditions in isolation

select \* from emp

where job = 'MANAGER' or sal < 1000

If AND OR are together then AND is executed first then OR

select \* from emp

where job = 'MANAGER' or job = 'CLERK' and sal < 1000

Parentheses will override the default precedence

select \* from emp

where (job = 'MANAGER' or job = 'CLERK' ) and sal < 1000

**Complex And/Or conditions:**

Select \* from Products2

where (country = 'India' and sales <= 500) OR (country = 'France' and sales >= 1200)

Select \* from Products2

where (country = 'India' and sales <= 500) OR (country = 'France' and sales >= 1200) **And Trans\_Id < 56**

**Range Operators:**

1. Between *lower value* And *higher value*
2. Not Between *lower value* And *higher value*
3. IN (*List of Values*)
4. NOT IN (*List of Values*)

Examples

1. Between

select \* from emp

where sal between 1250 And 3000;

(1250 and 3000 will be inclusive)

select \* from emp

where sal Not between 1250 And 3000;

(1250 and 3000 will be exclusive)

1. IN

select \* from emp

where job IN ('CLERK', 'MANAGER');

IN is equivalent to logical OR

**Retrieving NULL VALUES:**

IS NULL and IS NOT NULL operator

To display records where comm. is blank

select \* from emp

where comm is null

To display records where some comm. is provided.

select \* from emp

where comm is not null

**Checking Nulls with empty strings or zero-length strings**

Create table test\_nulls

(str1 varchar(10),

descr varchar(40)

)

Insert into test\_nulls Values('a','Actual Value Entered')

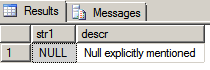
Insert into test\_nulls Values(' ','white space')

Insert into test\_nulls Values('','single quotes opened & closed')

Insert into test\_nulls Values(Null,'Null explicitly mentioned')

select \* from test\_nulls

where str1 is null



select \* from test\_nulls

where str1 is not null

**Pattern Matching Operator:**

**LIKE**

To replace any character and any number of characters use %

To display all the records where name starts with S

select \* from emp

where ename like 'S%'

**Underscore (\_):**

To replace particular number of characters use \_ (Underscore)

Demo table for example of underscore --

create table PCodes

(Code Varchar(20),

Qty Int)

go

Insert Into PCodes

Values('A01', 10)

Insert Into PCodes

Values('AB01', 20)

Insert Into PCodes

Values('ABC01',30)

Insert Into PCodes

Values('ABCD01',25)

Insert Into PCodes

Values('P01',35)

Insert Into PCodes

Values('PQ04',27)

Insert Into PCodes

Values('PQR01',29)

Insert Into PCodes

Values('01',28)

Insert Into PCodes

Values('A%C01',31)

Insert Into PCodes

Values('A%D01',32)

Insert Into PCodes

Values('AB\_01',33)

go

Select \* from Pcodes

go

To display records where there are exactly 3 characters before 01:

select \* from pcodes

where code like '\_\_\_01';

To display the records where the 3rd character is %

select \* from pcodes1

where code like 'AB**\%**Q1' **ESCAPE '\';**

