

```
### The ORDER BY Clause ==>
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```

* In Oracle , we might want to view data in a certain order, and for this we can use the ORDER BY clause.

* Syntax:

```
- SELECT columns | expressions FROM table WHERE conditions ORDER BY expression
[ ASC | DESC ];
```

WAQ to display ename and sal of employees in ascending order of sal.

```
- select ename, sal from emp order by sal;
```

ENAME	SAL
SMITH	800
JAMES	950
ADAMS	1100
WARD	1250
MARTIN	1250
MILLER	1300
TURNER	1500
ALLEN	1600
CLARK	2450
BLACK	2850
JONES	2975
SCOTT	3000
FORD	3000
KING	5000

WAQ to display ename and sal of employees in descending order of sal.

```
- select ename, sal from emp order by sal desc;
```

ENAME	SAL
KING	5000
FORD	3000
SCOTT	3000
JONES	2975
BLACK	2850
CLARK	2450
ALLEN	1600
TURNER	1500
MILLER	1300
WARD	1250
MARTIN	1250
ADAMS	1100
JAMES	950
SMITH	800

```
# Sorting On Col Position ==>
```

* Instead of listing the name of the column to be ordered, we can list the sequence number of the column in the SELECT list.

WAQ to display ename and sal of employees in ascending order of sal.

- select ename, sal from emp order by 2;
- The number 2 indicates the second column of the SELECT list.

ENAME	SAL
SMITH	800
JAMES	950
ADAMS	1100
WARD	1250
MARTIN	1250
MILLER	1300
TURNER	1500
ALLEN	1600
CLARK	2450
BLACK	2850
JONES	2975
SCOTT	3000
FORD	3000
KING	5000

```
#  Sorting On Multiple Cols ==>
=====
```

* A result set can be sorted by more than one column.

* In this case Oracle will first sort on the basis of first column and if it finds a duplicate value in first column then it considers the second mentioned column.

```
# select ename, sal from emp order by sal, ename;
- The above query first sorts on SAL and wherever SAL is same ,it considers
ASCENDING ORDER of ENAME
```

ENAME	SAL
SMITH	800
JAMES	950
ADAMS	1100
MARTIN	1250
WARD	1250
MILLER	1300
TURNER	1500
ALLEN	1600
CLARK	2450
BLACK	2850
JONES	2975
FORD	3000
SCOTT	3000
KING	

```
#  NULL And ORDER BY ==> (NULLS FIRST, NULLS LAST)
=====
```

* By default if the column on which sorting is being done contains NULL values then Oracle places NULL values at the end.

```
# select ename, sal, comm from emp order by comm;
```

ENAME	SAL	COMM
-------	-----	------

-----	-----	-----
TURNER	1500	0
ALLEN	1600	300
WARD	1250	500
MARTIN	1250	1400
SMITH	800	
JAMES	950	
ADAMS	1100	
MILLER	1300	
CLARK	2450	
BLACK	2850	
JONES	2975	
FORD	3000	
SCOTT	3000	
KING	5000	

* We can change the ordering of the NULLs with the option NULLS FIRST or NULLS LAST in the ORDER BY clause, as shown in the next statement.

```
# select distinct ename, sal, comm from emp order by comm NULLS FIRST;
```

-----	-----	-----
ENAME	SAL	COMM
SMITH	800	
JAMES	950	
ADAMS	1100	
MILLER	1300	
CLARK	2450	
BLACK	2850	
JONES	2975	
FORD	3000	
SCOTT	3000	
KING	5000	
TURNER	1500	0

-----	-----	-----
ENAME	SAL	COMM
ALLEN	1600	300
WARD	1250	500
MARTIN	1250	1400