

Miscellaneous Functions in Oracle ==> =====

* Miscellaneous functions are those functions which do not belong to any particular category but can be used for many useful purposes.

* These functions are:

- NVL
- NVL2
- COALESCE
- DECODE
- USER

NVL() ==> =====

* This function converts a null value to an actual value.

* Syntax :

- NVL (exp1, exp2)

* Arguments:

- Exp1 : This is the column name or expression which has to be checked for NULL.
- Exp2 : This is the column name or expression which has to be returned if EXPRESSION1 is NULL.

WAQ to display ename, sal, comm and total income of every employee.

- select ename, nvl(sal + comm, sal) as income from emp;
OR
- select ename, sal, comm, sal + nvl(comm, 0) as income from emp;

ENAME	SAL	COMM	INCOME
SMITH	800		800
ALLEN	1600	300	1900
WARD	1250	500	1750
JONES	2975		2975
MARTIN	1250	1400	2650
BLACK	2850		2850
CLARK	2450		2450
SCOTT	3000		3000
KING	5000		5000
TURNER	1500	0	1500
ADAMS	1100		1100
JAMES	950		950
FORD	3000		3000
MILLER	1300		1300

NVL2() ==> =====

* The NVL2() function examines the first expression. If the first expression is not NULL, then it returns the second expression. If the first expression is NULL, then the third expression is returned.

* Syntax :

- NVL2(exp1, exp2, exp3);

```
# WAQ to display ename, sal, comm and total income of every employe.
- select ename, sal, comm, nvl2(comm, comm + sal, sal) as income from emp;
```

ENAME	SAL	COMM	INCOME
SMITH	800		800
ALLEN	1600	300	1900
WARD	1250	500	1750
JONES	2975		2975
MARTIN	1250	1400	2650
BLACK	2850		2850
CLARK	2450		2450
SCOTT	3000		3000
KING	5000		5000
TURNER	1500	0	1500
ADAMS	1100		1100
JAMES	950		950
FORD	3000		3000
MILLER	1300		1300

```
# COALESCE() ==>
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* The COALESCE() function examines the first expression, if the first expression is not NULL, it returns that expression; Otherwise, it does a COALESCE of the remaining expressions.

* The advantage of the COALESCE() function over the NVL() function is that it can take multiple alternate values.

* Syntax :

```
- COALESCE(expression1, expression2, expression3,.....expression n)
```

```
# WAQ to display Ename, Sal, Comm and Total Income of all employees. Make sure to display salary if comm is null.
```

```
- select ename, sal, comm, coalesce(sal + comm, sal) as total_income from emp;
```

ENAME	SAL	COMM	TOTAL_INCOME
SMITH	800		800
ALLEN	1600	300	1900
WARD	1250	500	1750
JONES	2975		2975
MARTIN	1250	1400	2650
BLACK	2850		2850
CLARK	2450		2450
SCOTT	3000		3000
KING	5000		5000
TURNER	1500	0	1500
ADAMS	1100		1100

ENAME	SAL	COMM	TOTAL_INCOME
JAMES	950		950
FORD	3000		3000
MILLER	1300		1300

```
# DECODE() ==>
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* The DECODE() function decodes expression after comparing it to each search value.

* If the expression is the same as search, then result is returned.

* If the default value is omitted, a NULL value is returned where a col value does not match any of the search values.

* Syntax :

- DECODE(collexpression, search1, result1 [, search2, result2,...], default)

WAQ to display Ename,Sal and Revised Sal of Employees. The condition is that for ANALYST, the increment is 20%, for CLERK the increment is 10% and no increment for others

- select ename, job, sal, decode(job, 'ANALYST', sal + sal * 0.2, 'CLERK', sal + sal * 0.1, sal) as REV_SAL from emp;

ENAME	JOB	SAL	REV_SAL
SMITH	CLERK	800	880
ALLEN	SALESMAN	1600	1600
WARD	SALESMAN	1250	1250
JONES	MANAGER	2975	2975
MARTIN	SALESMAN	1250	1250
BLACK	MANAGER	2850	2850
CLARK	MANAGER	2450	2450
SCOTT	ANALYST	3000	3600
KING	PRESIDENT	5000	5000
TURNER	SALESMAN	1500	1500
ADAMS	CLERK	1100	1210

ENAME	JOB	SAL	REV_SAL
JAMES	CLERK	950	1045
FORD	ANALYST	3000	3600
MILLER	CLERK	1300	1430

USER ====>

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* For See USER name.

show user;

OR

select user from dual;