**Date function**

**Working with Dates:**

* Oracle database stores dates in an internal numeric format:

Century, Year, Month, day, hours, minutes, Seconds.

* The default date display format is DD-MON-YY

Ex: Select ename, hiredate from emp

**Sysdate:**

1. It is used to show our system date.

**Ex:**

* Select sysdate from dual;

**Currentdate:**

1. It is used to show our system date.

**EX:**

* Select currentdate from dual;

**Systimestamp:**

1. It is a function that returns date, time including milliseconds and time zone

EX:

* Select systimestamp from dual;

**Arithmetic With dates:**

1. Add or subtract a number to or from a date for a resultant date value
2. Subtract two dates to find the number of days between those date.

**Ex :**

To get future or past date

Select sysdate+100 , sysdate-70 from dual;

**Ex:**

Experience with years;

Select ename,hiredate, round((sysdate-hiredate)/365) from emp;

**ADD\_MONTHS(date, n) :**

1. **Adds the specific number of months (n) to a date**. The ‘n’ can be both negative and positive:

**EX:**

Select add\_months(sysdate, -1) as prev\_month , sysdate, add\_months (sysdate, 1) as next\_month from dual;

**LAST\_DAY(date):**

1. It **returns the last day in the month of the specified date.**

**EX:**

select sysdate, last\_day(sysdate) as last\_day\_curr\_month,

last\_day(sysdate) + 1 as first\_day\_next\_month from dual;

**The number of days until the end of the month.**

select last\_day(sysdate) - sysdate as days\_left

from dual

**MONTHS\_BETWEEN(date, date)** :

1. It calculates the **number of months between two dates.**

**Ex:**

select MONTHS\_BETWEEN ('31-MAR-2016', '28-FEB-2015')

from dual;

**Let’s select the number of months an employee has worked for the company.**

Select months\_between (sysdate, HIREDATE)

from emp;

**Elements of date format:**

1. YYYY- It is used to **display full year in number.**
2. YEAR- year **spelled out.**
3. MM- **two digit value for month.**
4. MONTH- it will display **full name of the month.**
5. MON- it will display **three letter of the month.**
6. DY- it will display **three letter of the day.**
7. DAY- **full name of the day.**
8. DD – it will display **numeric day of the month.**