

```
## Date Functions In Oracle =====>
=====
```

```
# Sysdate ==>
=====
```

```
* Return the current system date and time of the operating system.
```

```
# select sysdate from dual;
```

```
SYSDATE
-----
22-FEB-24
```

```
# Add_months() ==>
=====
```

```
* This function adds or subtract a number (n) representing month to a
date and returns the same day n months away.
```

```
# select add_months (sysdate, 2) from dual;
```

```
ADD_MONTH
-----
22-APR-24
```

```
# select add_months ('30-Nov-2024', -3) from dual;
```

```
ADD_MONTH
-----
31-AUG-24
```

```
# Last_day() ==>
=====
```

```
* This function takes a DATE argument and returns the last day of the
month of that date.
```

```
# select last_day (sysdate) from dual;
```

```
LAST_DAY
-----
29-FEB-24
```

```
# select last_day ('28-Aug-2002') from dual;
```

```
LAST_DAY
-----
31-AUG-02
```

```
# Next_day() ==>
=====
```

* This function returns the date of the first weekday specified by day name that is later than the given date.

```
# select next_day (sysdate, 'Sunday') from dual;
```

```
NEXT_DAY
-----
25-FEB-24
```

```
# select next_day ('21-Mar-2026', 'Sunday') from dual;
```

```
NEXT_DAY
-----
22-MAR-26
```

```
# Months_between() ==>
=====
```

* This function returns the number of months between two dates.
* If date1 comes after date2, then MONTHS_BETWEEN returns a positive number.
* If date1 comes before date2, then MONTHS_BETWEEN returns a negative number.

```
# select months_between ('21-Mar-2024', '23-Jul-2024') from dual;
```

```
MONTHS_BETWEEN
-----
-4.0645161
```

```
# select months_between ('21-Mar-2024', '21-Jan-2024') from dual;
```

```
MONTHS_BETWEEN
-----
2
```

```
# Greatest() ==>
=====
```

* This function returns the greatest date from the set of dates passed as argument.

```
# select greatest (to_date('21-Mar-2024'), to_date('21-Apr-2024')) from dual;
```

```
GREATEST
-----
21-APR-24
```

```
# Least() ==>
=====
```

* This function returns the smallest date from the set of dates passed as argument.

```
# select least (to_date('1-Oct-2024'), to_date('1-Dec-2024')) from dual;
```

LEAST

01-OCT-24

```
# Extract() ==>
```

=====

* This function extracts a specific component (year, month, day, hour, minute, second, etc.,) from the date passed as argument.

```
# SQL> select extract (year from sysdate) from dual;
```

EXTRACT(YEARFROMSYSDATE)

2024

```
# select extract (month from sysdate) from dual;
```

EXTRACT(MONTHFROMSYSDATE)

2

```
## Oracle Date Arithmetic ====>
```

=====

* We can perform lot of arithmetic operations on DATE datatype.

* These are :

- Adding or subtracting a number to or from a date.
- Subtracting two dates to find the number of days between those.
- Adding hours to a date.

```
# select sysdate + 3 from dual;
```

SYSDATE+3

25-FEB-24

```
# select sysdate - 23 from dual;
```

SYSDATE-23

30-JAN-24

```
# select sysdate - to_date('28-Aug-2002') from dual;
```

SYSDATE-TO_DATE('28-AUG-2002')

7848.83131

```
# XXXXXXXXXXXXXXXXXXXXXXXXXXXX===> Queries <===XXXXXXXXXXXXXXXXXXXXXXXXX
```

```
# WAQ to display number of days remaining in the current month ?  
- select last_day(sysdate) - sysdate from dual;
```

```
LAST_DAY(SYSDATE)-SYSDATE  
-----  
6
```

```
# WAQ to display number of days remaining in the current Year ?  
- select last_day(to_date('01-Dec-2024')) - trunc(sysdate) as days from  
dual;
```

```
DAYS  
-----  
312
```

```
# WAQ to display number of days since lockdown ?  
- select trunc(sysdate) - to_date('25-Mar-20') as days from dual;
```

```
DAYS  
-----  
1430
```

Suppose you are hired on a new job today , but with a salary which is less than what you had expected . However the HR manager has promised to raise your salary on the first day of the next month after 6 months.

```
# Your increment date -  
- select last_day(add_months(sysdate, 6)) + 1 as incr_date from dual;
```

```
INCR_DATE  
-----  
01-SEP-24
```

```
# No of days you have to wait for increment -  
- select last_day(add_months(trunc(sysdate), 6)) + 1 - trunc(sysdate)  
as left_days from dual;
```

```
LEFT_DAYS  
-----  
191
```