**DATE Functions**

**Sysdate( )** -- To know today’s date and time :

select sysdate from dual;

SYSDATE  
-------  
8-AUG-03

The format in which the date is displayed depends on NLS\_DATE\_FORMAT parameter.

For example set the NLS\_DATE\_FORMAT to the following format

alter session set NLS\_DATE\_FORMAT=’DD-MON-YYYY HH:MIpm’;

Then give the give the following statement

select sysdate from dual;  
  
SYSDATE  
------------------  
8-AUG-2003 03:05pm

The default setting of NLS\_DATE\_FORMAT is DD-MON-YY

Oracle enables you to extract the **day**, **month**, and **year** from a date using an **extract**function

select extract(day from sysdate) as only\_day from dual

select extract(month from sysdate) as only\_month from dual

select extract(year from sysdate) as only\_year from dual

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

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

from dual

**LAST\_DAY(date)** – Returns the last day in the month of the specified date d.

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)** – Calculates the number of months between two dates.

select MONTHS\_BETWEEN ('31-JAN-2014', '28-FEB-2014') from dual

;select MONTHS\_BETWEEN ('31-MAR-2013', '28-FEB-2013') from dual

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

|  |
| --- |
| Select months\_between (sysdate, date\_of\_hire)from employees |

**NEXT\_DAY(date, day\_of\_week)** – Returns the date of the first weekday specified that is later than the date.

select next\_day(sysdate, 'monday') as next\_Monday from dual

The **TO\_DATE** function can be used in the following versions of Oracle/PLSQL:

TO\_DATE('2003/07/09', 'yyyy/mm/dd')

Result: date value of July 9, 2003

TO\_DATE('070903', 'MMDDYY')

Result: date value of July 9, 2003

TO\_DATE('20020315', 'yyyymmdd')

Result: date value of Mar 15, 2002

SELECT TO\_DATE('2015/05/15 8:30:25', 'YYYY/MM/DD HH:MI:SS') FROM dual;

**String Functions:**

Length( ) - Returns length of character string

[SELECT](http://psoug.org/definition/SELECT.htm) LENGTH ('Dan Morgan') [FROM](http://psoug.org/definition/FROM.htm) [DUAL](http://psoug.org/definition/DUAL.htm);

Upper() - Returns the character string in upper case

[SELECT](http://psoug.org/definition/SELECT.htm) [UPPER](http://psoug.org/definition/UPPER.htm)('Dan Morgan') [FROM](http://psoug.org/definition/FROM.htm) [DUAL](http://psoug.org/definition/DUAL.htm);

Lower() - Returns the character string in lower case

[SELECT](http://psoug.org/definition/SELECT.htm) LOWER ('Dan Morgan') [FROM](http://psoug.org/definition/FROM.htm) [DUAL](http://psoug.org/definition/DUAL.htm);

Initcap() – Transforms string into init cap

SELECT INITCAP('ORADEV') FROM DUAL;

Concate() – Concatenates two strings

[SELECT](http://psoug.org/definition/SELECT.htm) CONCAT('Dan ', 'Morgan') [FROM](http://psoug.org/definition/FROM.htm) [DUAL](http://psoug.org/definition/DUAL.htm);

Substr() – Returns the substring from the given string

Syntax:  [SUBSTR](http://psoug.org/definition/SUBSTR.htm)( source\_string, start\_position, [ length ] )

SELECT SUBSTR(‘Hello’,0,2) FROM DUAL;

Note: If length (3rd parameter) is omitted then by default it is taking the length of entire string.

Max() – returns the string having alphabetical lower order in the specified column

[SELECT](http://psoug.org/definition/SELECT.htm) [MAX](http://psoug.org/definition/MAX.htm)(table\_name) [FROM](http://psoug.org/definition/FROM.htm) table\_name;

Min() – returns the string having alphabetical uper order in the specified column

[SELECT](http://psoug.org/definition/SELECT.htm) [MAX](http://psoug.org/definition/MAX.htm)(table\_name) [FROM](http://psoug.org/definition/FROM.htm) table\_name;

Reverse() – Reverses the given string as an argument

[SELECT](http://psoug.org/definition/SELECT.htm) [REVERSE](http://psoug.org/definition/REVERSE.htm)('Dan Morgan') [FROM](http://psoug.org/definition/FROM.htm) [DUAL](http://psoug.org/definition/DUAL.htm);

Ltrim() - LTRIM removed characters from the left of a string if they are equal to the specified string. Example: ltrim('aaaaaabc','a') = 'bc' If the last parameter is not specified, spaces are removed from the left side.

[SELECT](http://psoug.org/definition/SELECT.htm) LTRIM('aaaaaabc','a') [FROM](http://psoug.org/definition/FROM.htm) [DUAL](http://psoug.org/definition/DUAL.htm);

O/P – bc

Rtrim() - RTRIM removed characters from the right of a string if they are equal to the specified string. Example: rtrim('bcaaaaaa','a') = 'bc' If the last parameter is not specified, spaces are removed from the right side.

[SELECT](http://psoug.org/definition/SELECT.htm) RTRIM('bcaaaaaa','a') [FROM](http://psoug.org/definition/FROM.htm) [DUAL](http://psoug.org/definition/DUAL.htm);

O/P – bc

Note: In LTRIM() and RTRIM() if character is not specified (2nd parameter) then space is considered.

Trim() – Trims the leading and trailing spaces in the string. Variations are LTRIM() and RTRIM()

[SELECT](http://psoug.org/definition/SELECT.htm) TRIM( '   Dan Morgan    ') [FROM](http://psoug.org/definition/FROM.htm) [DUAL](http://psoug.org/definition/DUAL.htm);

Replace () - The replace function replaces every occurrence of a search\_string with a new string. If no new string is specified, all occurrences of the search\_string are removed. Example:

SELECT REPLACE('a1a1a1','a','2') FROM DUAL;

O/P 212121

Lpad() - Add characters to the left of a string until a fixed number is reached.

Example: lpad('abc',8,'x') = 'xxxxxabc'. If the last parameter is not specified, spaces are added to the left.

Rpad() - Add characters to the right of a string until a fixed number is reached.

Example: rpad('abc',8,'x') = 'abcxxxxx'. If the last parameter is not specified, spaces are added to the right.