Functions in Date (ORACLE)

1. add\_months

Add a number of months (n) to a date and return the same day which is n of months away.

ADD\_MONTHS( DATE '2016-02-29', 1 )

1. [CURRENT\_DATE](https://www.oracletutorial.com/oracle-date-functions/oracle-current_date/)

Return the current date and time in the session time zone.

SELECT CURRENT\_DATE FROM dual

1. [CURRENT\_TIMESTAMP](https://www.oracletutorial.com/oracle-date-functions/oracle-current_timestamp/)

Return the current date and time with time zone in the session time zone

SELECT CURRENT\_TIMESTAMP FROM dual

1. [EXTRACT](https://www.oracletutorial.com/oracle-date-functions/oracle-extract/)

Extract a value of a date time field e.g., YEAR, MONTH, DAY, … from a date time value.

EXTRACT(YEAR FROM SYSDATE)

1. [LAST\_DAY](https://www.oracletutorial.com/oracle-date-functions/oracle-last_day/)

Gets the last day of the month of a specified date.

LAST\_DAY(DATE '2016-02-01')

1. [MONTHS\_BETWEEN](https://www.oracletutorial.com/oracle-date-functions/oracle-months_between/)

Return the number of months between two dates.

MONTHS\_BETWEEN( DATE '2017-07-01', DATE '2017-01-01' )

1. [NEXT\_DAY](https://www.oracletutorial.com/oracle-date-functions/oracle-next_day/)

Get the first weekday that is later than a specified date.

NEXT\_DAY( DATE '2000-01-01', 'SUNDAY' )

1. [ROUND](https://www.oracletutorial.com/oracle-date-functions/oracle-round/)

Return a date rounded to a specific unit of measure.

ROUND(DATE '2017-07-16', 'MM')

1. [TO\_CHAR](https://www.oracletutorial.com/oracle-date-functions/oracle-to_char/)

Convert a [DATE](https://www.oracletutorial.com/oracle-basics/oracle-date/) or an [INTERVAL](https://www.oracletutorial.com/oracle-basics/oracle-interval/) value to a character string in a specified format.

TO\_CHAR( DATE'2017-01-01', 'DL' )

1. [TO\_DATE](https://www.oracletutorial.com/oracle-date-functions/oracle-to_date/)

Convert a date which is in the character string to a DATE value.

TO\_DATE( '01 Jan 2017', 'DD MON YYYY' )

CASE STUDY (APPLICATION)

#### Datetime Datatypes

#### CREATE TABLE PURCHASE\_TIME(C\_ID NUMBER,PRODUCT VARCHAR2(20),C\_DT DATE);

#### DESC PURCHASE\_TIME;

#### INSERT INTO PURCHASE\_TIME VALUES(1,'ONEPLUS','01-JAN-2023');

#### INSERT INTO PURCHASE\_TIME VALUES(2,'IPHONE',DATE '2023-01-02');

#### INSERT INTO PURCHASE\_TIME VALUES(3,'REDMI',TIMESTAMP '2023-01-03 00:00:00');

#### SELECT \* FROM PURCHASE\_TIME;

#### UPDATE PURCHASE\_TIME SET C\_DT='20-JAN-2023' WHERE C\_ID=1;

#### UPDATE PURCHASE\_TIME SET C\_DT='21-JAN-2023' WHERE C\_ID=2;

#### UPDATE PURCHASE\_TIME SET C\_DT='22-JAN-2023' WHERE C\_ID=3;

#### DELETE FROM PURCHASE\_TIME WHERE C\_ID=1;

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#### Timestamp Datatypes

#### CREATE TABLE TRANSACTION\_TIME(T\_ID NUMBER,TRANSACTION VARCHAR2(20),T\_DT TIMESTAMP);

#### DESC TRANSACTION\_TIME;

#### INSERT INTO TRANSACTION\_TIME VALUES(1,'TRANSACTION1','01-JAN-2023');

#### INSERT INTO TRANSACTION\_TIME VALUES(2,'TRANSACTION2',TIMESTAMP '2023-01-02 02:45:56');

#### INSERT INTO TRANSACTION\_TIME VALUES(3,'TRANSACTION3',TIMESTAMP '2023-01-03 00:00:00 -08:00');

#### SELECT \* FROM TRANSACTION\_TIME;

#### UPDATE TRANSACTION\_TIME SET T\_DT='20-JAN-2023' WHERE T\_ID=1;

#### UPDATE TRANSACTION\_TIME SET T\_DT='21-JAN-2023 01:20:40' WHERE T\_ID=2;

#### UPDATE TRANSACTION\_TIME SET T\_DT='22-JAN-2023 11:10:20' WHERE T\_ID=3;

#### DELETE FROM TRANSACTION\_TIME WHERE T\_ID=1;

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#### TIMESTAMP WITH TIME ZONE Datatype

#### CREATE TABLE ADMISSION\_TIME(A\_ID NUMBER,ADMISSION VARCHAR2(20),A\_DT TIMESTAMP WITH TIME ZONE);

#### DESC ADMISSION\_TIME;

#### INSERT INTO ADMISSION\_TIME VALUES(1,'PRAVEER','01-JAN-2023 2:00:00 AM -07:00');

#### INSERT INTO ADMISSION\_TIME VALUES(2,'TEJVEER',TIMESTAMP '2023-01-02 02:45:56');

#### INSERT INTO ADMISSION\_TIME VALUES(3,'NEHAL',TIMESTAMP '2023-01-03 00:00:00 -08:00');

#### SELECT \* FROM ADMISSION\_TIME;

#### UPDATE ADMISSION\_TIME SET A\_DT='20-JAN-2023 02:04:50 AM +4:00' WHERE A\_ID=1;

#### DELETE FROM ADMISSION\_TIME WHERE A\_ID=1;

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#### 4) TIMESTAMP WITH LOCAL TIME ZONE Datatype

#### CREATE TABLE MESSAGE\_TIME(M\_ID NUMBER,MESSAGE VARCHAR2(20),M\_DT TIMESTAMP WITH LOCAL TIME ZONE);

#### DESC MESSAGE\_TIME;

#### INSERT INTO MESSAGE\_TIME VALUES(1,'MESSAGE1','01-JAN-2023 2:00:00');

#### INSERT INTO MESSAGE\_TIME VALUES(2,'MESSAGE2',TIMESTAMP '2023-01-02 02:45:56');

#### INSERT INTO MESSAGE\_TIME VALUES(3,'MESSAGE3',TIMESTAMP '2023-01-03 00:00:00 -08:00');

#### SELECT \* FROM MESSAGE\_TIME;

#### UPDATE MESSAGE\_TIME SET M\_DT='20-JAN-2023' WHERE M\_ID=1;

#### UPDATE MESSAGE\_TIME SET M\_DT='21-JAN-2023 01:20:40' WHERE M\_ID=2;

#### UPDATE MESSAGE\_TIME SET M\_DT='22-JAN-2023 11:10:20' WHERE M\_ID=3;

#### DELETE FROM MESSAGE\_TIME WHERE M\_ID=1;

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