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## Title

P08. Explicitly convert a data type to another data type.

## Description

You want to convert a data type to another data type explicitly.

Typical tasks and related single-row functions: - Convert a date literal string to date. - Use `to_date()` with a date-time format model. - Convert a date to a formatted date literal string. - Use `to_char()` with a date-time format model. - Convert a formatted number literal string to a number. - Use `to_number()` with a number format model. - Convert a number to a formatted number literal string. - Use `to_char()` with a number format model.

Oracle Format Models: - Date-Time Format Models, 19c - Number Format Models, 19c

## Example

### Convert a date literal string to a date

Convert the date literal string 'January 1, 2010' to a date using the current session's `NLS_DATE_LANGUAGE` setting.

```
1 select to_date('January 1, 2010', 'Month DD, YYYY') from dual;
```

where - `Month` is the full name of the month. - `DD` is the day of the month. - `YYYY` is the century and year.

To find the current `NLS_DATE_LANGUAGE` setting, use the following SQL statement:

```
1 select * from nls_session_parameters where parameter = '
  NLS_DATE_LANGUAGE';
```

Convert the Chinese date literal string '1月 1, 2010' to a date by specifying the `NLS_DATE_LANGUAGE` explicitly.

```
1 select to_date('1月 1, 2010', 'Month DD, YYYY', q'[NLS_DATE_LANGUAGE='
  TRADITIONAL CHINESE]') from dual;
```

### Convert a date to a formatted date literal string

Output the date literal string with the format 'Jan 1st, 2010':

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```
1 select to_char(sysdate, 'Mon DDth, YYYY') from dual;
```

where: - **Mon** is the abbreviated name of the month. - **DD** is the day of the month. - **th** is the ordinal suffix. - **YYYY** is the century and year.

### Convert a formatted number literal string to a number

Convert the number literal '**NT\$1,000.00**' to number with the explicit NLS\_CURRENCY setting:

```
1 select to_number('NT$1,000.00', 'L999G999D00', 'NLS_CURRENCY=NT$') from dual;
```

where: - **L** is the local currency symbol. - **G** is the group separator. - **D** is the decimal character.

### Format a number to a formatted number literal

Print 1000 as **\$1000.00** using the current session's NLS\_CURRENCY setting:

```
1 select to_char(1000, 'L999G999D00', 'NLS_CURRENCY=$') from dual;
```