

SQL Functions –Data Type Conversion Functions

Data Type Conversion Functions

The data type conversion functions are used to convert or change data from one data type to another.

Some of the data type conversion functions are stated below:

- ◆ to_date
- ◆ to_char
- ◆ to_number

TO_DATE

The **To_date** function converts a string to a date.

The general syntax of to_date function is:

```
TO_DATE (Expression1[, Expression2 [, Expression3]])
```

Parameter	Description
Expression1	A CHAR or VARCHAR2 expression.
Expression2	The format string. This expression is usually required. It is optional only when Expression1 is in the default date format YYYY-MM-DD HHMMSS.
Expression3	A CHAR or VARCHAR2 expression to specify the NLS parameter which is currently ignored.

TO_DATE

```
SQL> select To_Date('2005-09-22', 'YYYY-MM-DD') Date_val  
2 From Dual;
```

```
DATE_VAL  
-----  
22-SEP-05
```

```
SQL> select To_Date('January 23, 2012', 'Month DD, YYYY') Date_Val  
2 From Dual;
```

```
DATE_VAL  
-----  
23-JAN-12
```

```
SQL> select To_Date('14/08/2010', 'DD/MM/YYYY') Date_Val  
2 From Dual;
```

```
DATE_VAL  
-----  
14-AUG-10
```

```
SQL> select To_Date('21042014', 'DDMMYYYY') Date_Val  
2 From Dual;
```

```
DATE_VAL  
-----  
21-APR-14
```

TO_CHAR

The **To_char function** converts a number or date to a string.

The general syntax of analytic function is:

```
TO_CHAR (Expression1[, Expression2 [, Expression3]])
```

Parameter	Description
Expression1	It can either be a number or date that will be converted to a string.
Expression2	This is the format that will be used to convert <i>value</i> to a string.
Expression3	This is the nls language used to convert <i>value</i> to a string.

TO_CHAR

```
SQL> select To_CHAR(SYSDATE, 'YYYY-MM-DD') Date_Char
2 From Dual;
```

```
DATE_CHAR
-----
2014-05-26
```

```
SQL>
SQL> select To_CHAR(SYSDATE, 'Month DD, YYYY') Date_char
2 From Dual;
```

```
DATE_CHAR
-----
May          26, 2014
```

```
SQL>
SQL> select To_CHAR(SYSDATE, 'DD/MM/YYYY') Date_char
2 From Dual;
```

```
DATE_CHAR
-----
26/05/2014
```

```
SQL>
SQL> select To_CHAR(SYSDATE, 'DDMMYYYY') Date_char
2 From Dual;
```

```
DATE_CHA
-----
26052014
```

```
SQL> Select To_Char(15.345) Num_Char
2 From Dual;
```

```
NUM_CH
-----
15.345
```

TO_NUMBER

The To_Number function converts a string to a number

The general syntax of months_between is:

```
TO_NUMBER( Expression-1, [Expression-2] )
```

Parameter	Description
Expression-1	It is the string that will be converted to a number
Expression-2	This is the format that will be used to convert <i>string</i> to a number. This is optional

TO_NUMBER

```
SQL> Select To_Number('$23567', '$9999999') as Number_val  
2 From dual;
```

```
NUMBER_VAL
```

```
-----  
23567
```

```
SQL>  
SQL> Select To_Number('55,345', '9,999,999') as Number_val  
2 From dual;
```

```
NUMBER_VAL
```

```
-----  
55345
```

```
SQL>  
SQL> Select To_Number('$67,890.45', '$999,999.99') as Number_val  
2 From dual;
```

```
NUMBER_VAL
```

```
-----  
67890.45
```

```
SQL>  
SQL> Select To_Number('5000.9876', '999999.99999') as Number_val  
2 From dual;
```

```
NUMBER_VAL
```

```
-----  
5000.9876
```