

# EXAMPLE - DATE and TIME Functions

This example provides an overview on various date and time functions.

## Functions:

| Item                | Description   |
|---------------------|---|
| DATE Function       | Generates a date value from three inputs of Integer type: year, month, and day.   |
| TIME Function       | Generates time values from three inputs of Integer type: hour, minute, and second.  |
| DATETIME Function   | Generates a Datetime value from the following inputs of Integer type: year, month, day, hour, minute, and second.   |
| DATEFORMAT Function | Formats a specified Datetime set of values according to the specified date format. Source values can be a reference to a column containing Datetime values. |

## Source:

| year | month | day | hour | minute | second |
|------|-------|-----|------|--------|--------|
| 2016 | 10    | 11  | 2    | 3      | 0      |
| 2015 | 11    | 20  | 15   | 22     | 30     |
| 2014 | 12    | 25  | 18   | 30     | 45     |

## Transformation:

|                                   |   |
|-----------------------------------|---|
| <b>Transformation Name</b>        | New formula                                       |
| <b>Parameter: Formula type</b>    | Single row formula                                |
| <b>Parameter: Formula</b>         | DATEFORMAT(DATE (year, month, day), 'yyyy-MM-dd') |
| <b>Parameter: New column name</b> | 'fctn_date'                                       |

|                                   |   |
|-----------------------------------|---|
| <b>Transformation Name</b>        | New formula   |
| <b>Parameter: Formula type</b>    | Single row formula                                  |
| <b>Parameter: Formula</b>         | DATEFORMAT(TIME (hour, minute, second), 'HH-mm-ss') |
| <b>Parameter: New column name</b> | 'fctn_time'   |

|                                   |  |
|-----------------------------------|--|
| <b>Transformation Name</b>        | New formula  |
| <b>Parameter: Formula type</b>    | Single row formula   |
| <b>Parameter: Formula</b>         | DATEFORMAT(DATETIME (year, month, day, hour, minute, second), 'yyyy-MM-dd-HH:mm:ss') |
| <b>Parameter: New column name</b> | 'fctn_datetime'  |

## Results:

**NOTE:** All inputs must be inferred as Integer type and must be valid values for the specified input. For example, month values must be integers between 1 and 12, inclusive.

| year | month | day | hour | minute | second | fctn_date  | fctn_time | fctn_datetime       |
|------|-------|-----|------|--------|--------|------------|-----------|---------------------|
| 2016 | 10    | 11  | 2    | 3      | 0      | 2016-10-11 | 02-03-00  | 2016-10-11-02:03:00 |
| 2015 | 11    | 20  | 15   | 22     | 30     | 2015-11-20 | 15-22-30  | 2015-11-20-15:22:30 |
| 2014 | 12    | 25  | 18   | 30     | 45     | 2014-12-25 | 18-30-45  | 2014-12-25-18:30:45 |

You can apply other date and time functions to the generated columns. For an example, see *YEAR Function*.