

EXAMPLE - DATEDIF Function

This example illustrates how to use the `DATEDIF` function to calculate the number of days that have elapsed between the order date and today for purposes of informing the customer.

Source:

For the orders in the following set, you want to charge interest for those ones that are older than 90 days.

OrderId	OrderDate	Amount
1001	1/31/16	1000
1002	11/15/15	1000
1003	12/18/15	1000
1004	1/15/16	1000

Transform:

The first step is to create a column containing today's (3/16/16) date value:

```
derive type:single value:TODAY() as:'Today'
```

You can now use this value as the basis for computing the number of elapsed days for each invoice:

```
derive type:single value:DATEDIF(OrderDate, Today, day)
```

The age of each invoice in days is displayed in the new column. Now, you want to add a little bit of information to this comparison. Instead of just calculating the number of days, you could write out the action to undertake.

Replace the above with the following:

```
derive type:single value:IF((DATEDIF(OrderDate, Today, day) > 90),'Charge interest','no action') as:'TakeAction'
```

To be fair to your customers, you might want to issue a notice at 45 days that the invoice is outstanding. You can replace the above with the following:

```
derive type:single value:IF(DATEDIF(OrderDate, Today, day) > 90,'Charge interest',IF(DATEDIF(OrderDate, Today, day) > 45),'Send letter','no action')) as: 'TakeAction'
```

By using nested instances of the `IF` function, you can generate multiple results in the `TakeAction` column.

For the items that are over 90 days old, you want to charge 5% interest. You can do the following:

```
set col:Amount value:IF(TakeAction == 'Charge interest',Amount * 1.05,Amount)
```

The above sets the value in the `Amount` column based on the conditional of whether the `TakeAction` column value is `Charge interest`. If so, apply 5% interest to the value in the `Amount` column.

Results:

OrderId	OrderDate	Amount	Today	TakeAction
1001	1/31/16	1000	03/03/16	no action
1002	11/15/15	1050	03/03/16	Charge interest

1003	12/18/15	1000	03/03/16	Send letter
1004	1/15/16	1000	03/03/16	Send letter