Rearranging worksheet data: From 1 to many columns

With SigmaPlots built-in User-Defined Transform language, you can transform, calculate, and rearrange data. Here is an example which shows how you can quickly rearrange input data from 1 column into many columns.

Assume you have received a data set with several variables, as a sequence of blocks per case, all in one column:

	1
1	X
2	Y
3	
4	1,0000
5	10,0000
6	
7	2,0000
8	11,0000
9	
10	3,0000
11	12,0000
12	
13	4,0000
14	13,0000
15	
16	5,0000
17	14,0000
18	

etc....

To create a graph or further analyze them, you need them like this:

3	4
X	Y
1,0000	10,0000
2,0000	11,0000
3,0000	12,0000
4,0000	13,0000
5,0000	14,0000

Here is a transform which will copy and rearrange the data.

```
'this is the data column
Col_in=1

'this is the destination column
Col_out=3

'this is the number of columns desired
Interval=3

'This separates the input columns into
' the number of desired columns
for i=1 to Interval do
     col(i+Col_out-1)=nth(col(Col_in;i);Interval)
end for
```

What the transform does:

```
'this is the data column
```
       This is a comment line (from the 'apostroph to the end of the line).

```
Col_in=1
Col_out=3
```
       assign variable values: column numbers for input and output

```
cell(c1;r1) = cell(c2;r2)
```
       copies from cell to cell

```
for i=1 to Interval do
      col(i+Col_out-1)=nth(col(Col_in;i);Interval)
end for
```
       'This separates the input columns into ' the number of desired columns

nth
The nth function returns a sampling of a provided range, with the frequency indicated by a scalar number. The result always begins with the first entry in the specified range.
Syntax: `nth(range,increment)`

Finally, you can shift the values up by 1, making the first row the column titles:
Select both columns in the worksheet.
Select Worksheet > Cells > Titles.
Click the Promote button.

3-X	4-Y
1,0000	10,0000
2,0000	11,0000
3,0000	12,0000
4,0000	13,0000
5,0000	14,0000