Expression code I used in this SAS Visual Analytics Tips & Tricks video - a smart and dynamic way to create intervals/groups based on a numeric column.

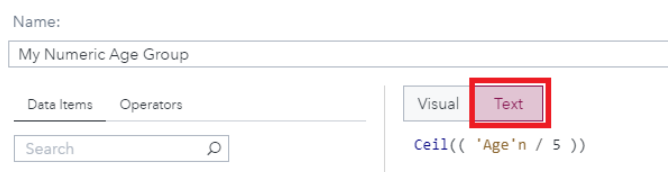These expression code examples should work both on Viya 3.5 and 4.

Please note that you will encounter errors when copying these code examples, as your column names will most probably not be the same as I use in my examples below. No worries, just change them into your column names.

Remember: I'm also using a numeric parameter, which I have named **Count_In_Each_Interval**. To make things more convenient for you, I do recommend you do define a numeric parameter with the same name as I use and set the default value to 5.

How to copy my expression code into your expression builder?

Viya 3.5 and Viya 4 versions before 2023.06
1. Go to the left data panel and click on "+ New Data Item" and then select "Calculated item"
2. The expression builder window should now appear…
3. Give you expression an appropriate name
4. Open "Text" mode (click on the "Text" tab)

5. Paste my expression code into your expression builder using CTRL-V
6. Verify that result type and format are set as you expect
7. Modify the expression if needed, i.e. change columns
8. Press "OK" to save your expression

Viya 4 versions 2023.06+ (React version)

1. Go to the left data panel and click on "+ New Data Item" and then select "Calculated item"
2. The expression builder window should now appear…
3. Give you expression an appropriate name
4. Paste my expression code into your expression builder using CTRL-V
5. Verify that format is set as you expect
6. Modify the expression if needed, i.e. change columns
7. Press "OK" to save your expression

The key calculation
Column Name: Age Group (Numeric)
My format settings: COMMA12.

Expression Code:
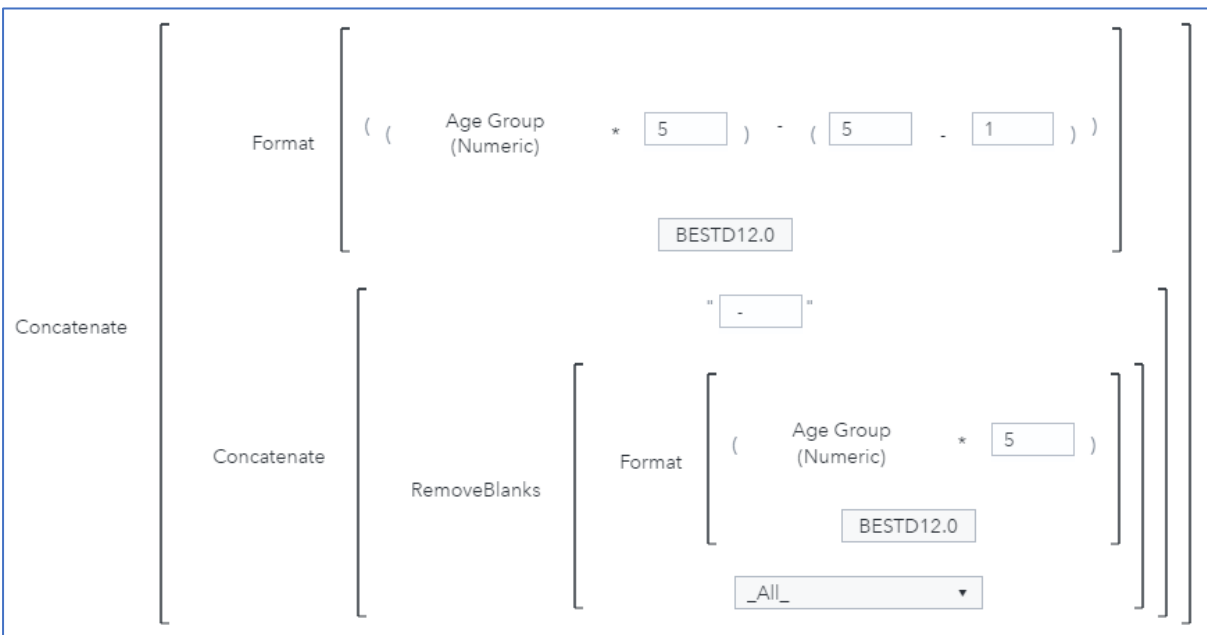
Ceil(('Age'n / 5))

User-friendly age groups
Column Name: Age Group
My format settings: $. (this is the symbol for character format)
Please Note: I use the key calculation 'Age Group (Numeric)' in this expression
Important: If you are running a VA version of 2023.06 or later, you need to change the '_All_' option into 'All'

Expression Code:

Concatenate(Format((('Age Group (Numeric)'n * 5) - (5 - 1))
, 'BESTD12.0'), Concatenate(' - ', RemoveBlanks(Format((
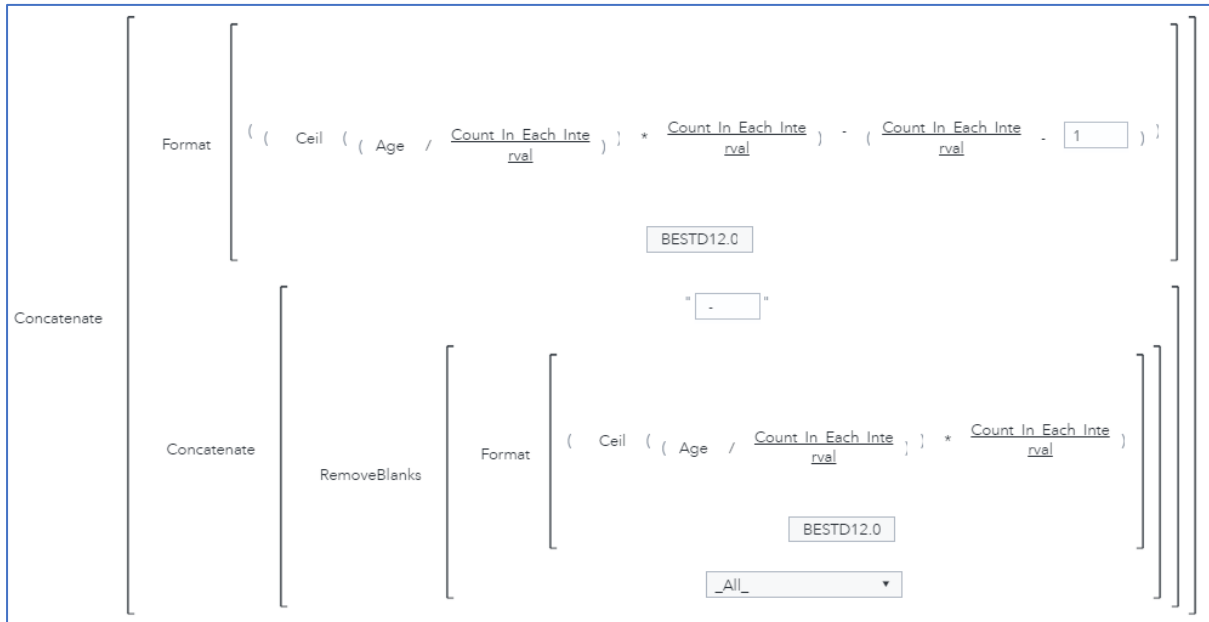'Age Group (Numeric)'n * 5), 'BESTD12.0'), _All_)))

Dynamic age groups

Column Name: Dynamic Age Group

My format settings: $. (This is the symbol for character format)

Please Note: This calculation needs to have a numeric parameter defined, in my case I have created a numeric parameter called 'Count_In_Each_Interval' and I set the default value to 5

Important: If you are running a VA version of 2023.06 or later, you need to change the '_All_' option into 'All'

Expression Code:

```
Concatenate(Format(( ( Ceil(( 'Age'n / 'Count_In_Each_Interval'p
)) * 'Count_In_Each_Interval'p ) - ( 'Count_In_Each_Interval'p -
1 ) ), 'BESTD12.0'), Concatenate(' - ', RemoveBlanks(Format((
Ceil(( 'Age'n / 'Count_In_Each_Interval'p )) *
'Count_In_Each_Interval'p ), 'BESTD12.0'), _All_)))
```