



How to Bin Numeric Variables in IBM SPSS Statistics

Transforming a Numeric Variable

Statistics

Age of respondent

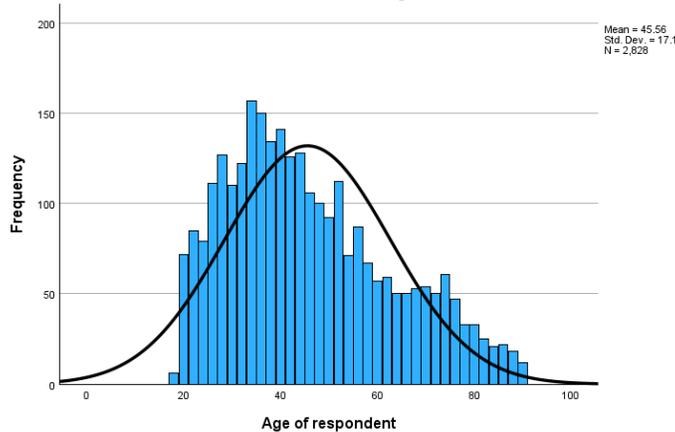
N	Valid	2828
	Missing	4
Mean		45.56
Median		42.00
Std. Deviation		17.100
Range		71
Minimum		18
Maximum		89

We want to create a new grouped variable and keep the original numeric variable

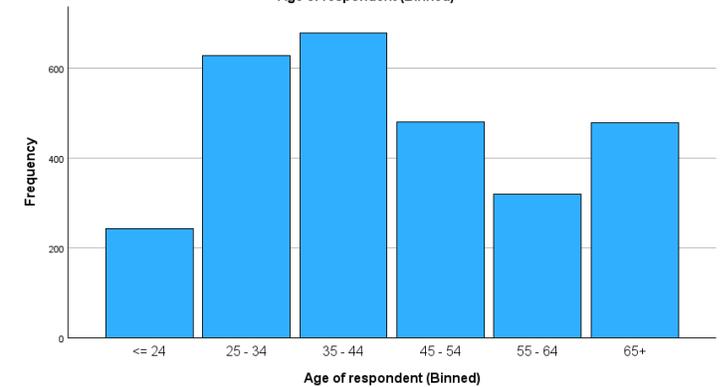
Age of respondent (Binned)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	<= 24	242	8.5	8.6	8.6
	25 - 34	627	22.1	22.2	30.7
	35 - 44	679	24.0	24.0	54.7
	45 - 54	481	17.0	17.0	71.7
	55 - 64	320	11.3	11.3	83.1
	65+	479	16.9	16.9	100.0
	Total		2828	99.9	100.0
Missing	NA	4	.1		
Total		2832	100.0		

Histogram



Age of respondent (Binned)



Visual Binning

1. Open your dataset in SPSS.
2. Go to **Transform > Visual Binning**.
3. Select the numeric variable you want to bin and click Continue.
4. Name the new binned variable in **Binned Variable** box.
5. Now click the **Make Cutpoints** button.
6. Choose the method to create cut points (e.g., equal width, equal percentiles).
7. Define cutpoints and click **Apply**.
8. Click **Make Labels** and click **OK**.
9. The new categorical variable will appear in your dataset.

Visual Binning

Scanned Variable List:

- age

Name: Current Variable: age Binned Variable: age groups Minimum: 18 Nonmissing Values Maximum: 89 Label: Age of respondent Age of respondent (Binned)

Cases Scanned: 2832 Missing Values: 4

Copy Bins: From Another Variable... To Other Variables...

Enter interval cutpoints or click Make Cutpoints for automatic intervals. A cutpoint value of 10, for example, defines an interval starting above the previous interval and ending at 10.

Grid:	Value	Label
1		HIGH
2		

Upper Endpoints:
 Included (<=)
 Excluded (<)

Make Cutpoints...
Make Labels
 Reverse scale

OK Paste Reset Cancel Help

Make Cutpoints

Equal Width Intervals
Intervals - fill in at least two fields
First Cutpoint Location: 24
Number of Cutpoints: 5
Width: 10
Last Cutpoint Location: 64

Equal Percentiles Based on Scanned Cases
Intervals - fill in either field
Number of Cutpoints:
Width(%):

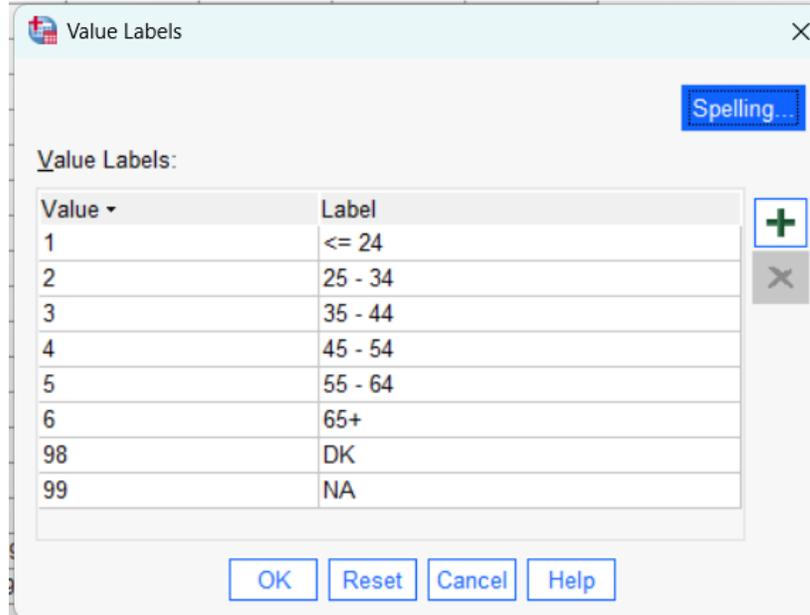
Cutpoints at Mean and Selected Standard Deviations Based on Scanned Cases
 +/- 1 Std. Deviation
 +/- 2 Std. Deviation
 +/- 3 Std. Deviation

Apply will replace the current cutpoint definitions with this specification. A final interval will include all remaining values: N cutpoints produce N+1 intervals.

Apply Cancel Help

Why Visual Binning is the Best Option

- *Labels are created automatically.*
- *New variable created in your data.*

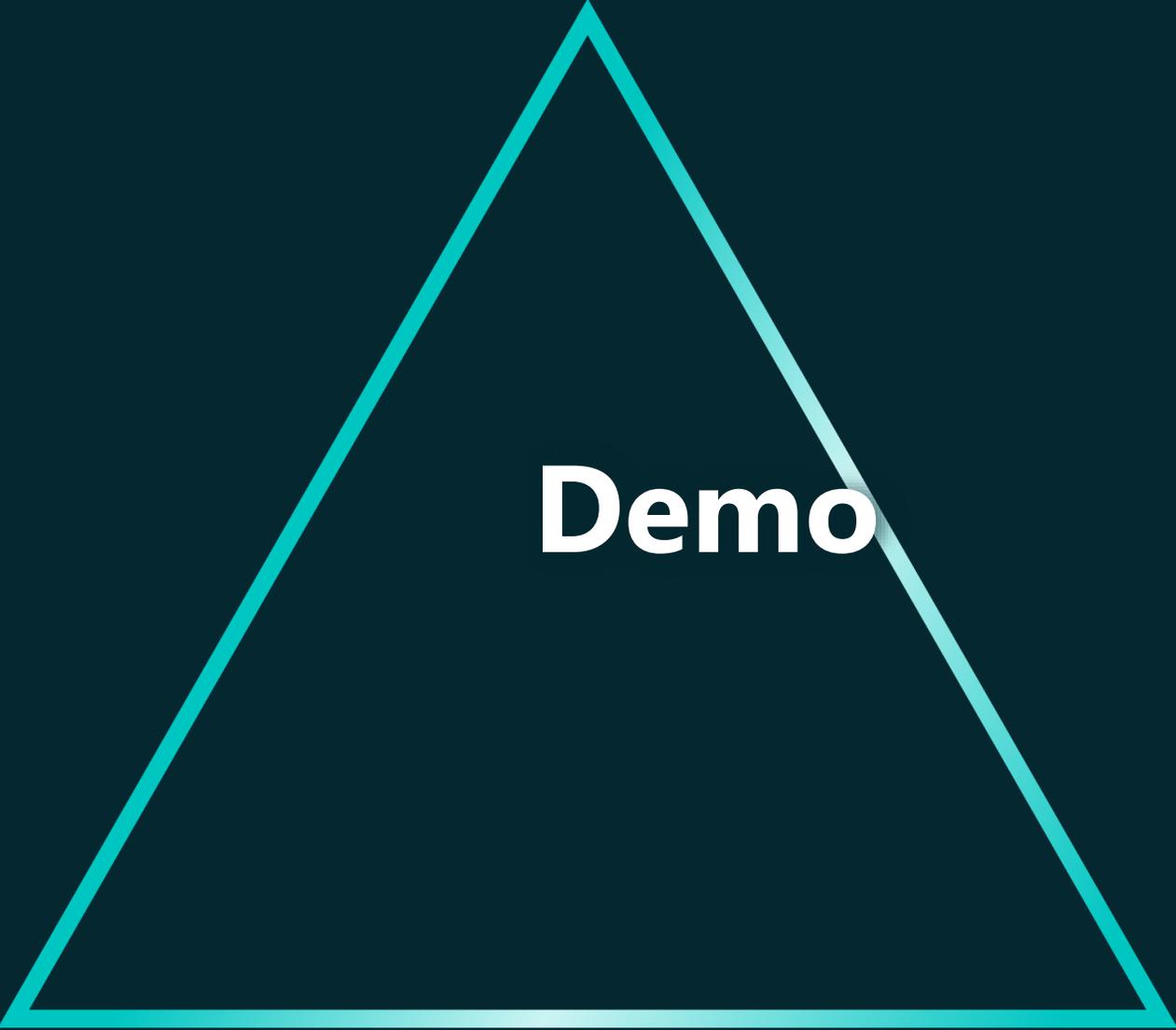


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Tips and Best Practices

1. Verify the new variable by checking the frequencies and distributions.
2. You can place multiple variables into Visual Binning and create different splits.
3. Have a clear rationale for the splits (e.g., we are splitting age to match the groupings that we use in our monthly reports).
4. Document the binning process for reproducibility.
5. Use Paste to save syntax so that you save splits.
6. Consider the impact of binning on your analysis and results.



Demo