MINIMUM

PURPOSE
Specifies the minimum value to appear on the plot axes of subsequent plots.

DESCRIPTION
For most data analysis applications, the analyst need not bother with the MINIMUM command since DATAPLOT generates neat limits based on the data. If the default limits are not acceptable, then the analyst can make use of the MINIMUM, MAXIMUM, or LIMITS commands to specify the minimum, maximum, or both, respectively.

SYNTAX
\[<\text{prefix}>\text{MINIMUM} \ <n>\]
where \(<\text{prefix}>\) is one of the following:
- \(X\) refers to the horizontal axis;
- \(Y\) refers to the vertical axis;
and \(<n>\) is a number or parameter that specifies the desired lower limit.

EXAMPLES
- MINIMUM 4.5
- XMINIMUM 100
- YMINIMUM 100
- XMINIMUM A

NOTE
The \(...\text{MINIMUM}\) command with no argument reverts the minima to the default. A \(...\text{MINIMUM}\) command with no prefix refers to both axes. Thus MINIMUM 3 sets the minima for both axes to 3.

DEFAULT
Automatically computed neat minima based on the data.

SYNONYMS
MIN

RELATED COMMANDS
\[
\begin{align*}
\text{PLOT} & = \text{Generates a data or function plot.} \\
\text{LIMITS} & = \text{Sets the frame limits for all plots.} \\
\text{MAXIMUM} & = \text{Sets the frame maxima for all plots.} \\
\text{CLASS UPPER} & = \text{Sets the maximum of the highest class for histograms, frequency plots, and pie charts.} \\
\text{CLASS LOWER} & = \text{Sets the minimum of the lowest class for histograms, frequency plots, and pie charts.} \\
\text{CLASS WIDTH} & = \text{Sets the class width for histograms, frequency plots, and pie charts.}
\end{align*}
\]

APPLICATIONS
Neat axes

IMPLEMENTATION DATE
Pre-1987
PROGRAM

LET LEAD = DATA ...
   164 426 59 98 312 263 607 497 213 54 160 262 547 325 419 94 70
LET POT = DATA ...
   106 175 61 79 94 121 424 328 107 218 140 179 246 231 245 339 99
.
TITLE DEMONSTRATE MINIMUM COMMAND
TITLE SIZE 5
X1LABEL LEAD
Y1LABEL POTASSIUM
CHARACTER CIRCLE
CHARACTER SIZE 1.5
LINE BLANK ALL.
.
XMINIMUM 50
XTIC OFFSET 10
YMINIMUM 50
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PLOT POT VS LEAD

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DEMONSTRATE MINIMUM COMMAND

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