LOWER HINGE

PURPOSE

Compute the lower hinge for a variable.

DESCRIPTION

The lower hinge is a pseudo 25% point of the variable (see the Tukey book listed in the reference below). Specifically, it is the median of the points between the minimum and the full sample median.

SYNTAX

LET <par> = LOWER HINGE <y>

<SUBSET/EXCEPT/FOR qualification>

where *<*y> is a response variable;

<par> is a parameter where the computed lower hinge is stored; and where the <SUBSET/EXCEPT/FOR qualification> is optional.

EXAMPLES

LET A = LOWER HINGE Y1 LET A = LOWER HINGE Y1 SUBSET TAG > 2

DEFAULT

None

SYNONYMS

None, although LOWER QUARTILE is closely related.

RELATED COMMANDS

HINGE PLOT	=	Generate a hinge versus subset plot.
MINIMUM	=	Compute the minimum of a variable.
MAXIMUM	=	Compute the maximum of a variable.
LOWER QUARTILE	=	Compute the lower quartile of a variable.
UPPER QUARTILE	=	Compute the upper quartile of a variable.
UPPER HINGE	=	Compute the upper hinge of a variable.
DECILE	=	Compute the decile of a variable.
MEAN	=	Compute the mean of a variable.
STANDARD DEVIATION	=	Compute the standard deviation of a variable.

REFERENCE

"Exploratory Data Analysis," John Tukey, Addison-Wesley, 1977.

APPLICATIONS

Exploratory Data Analysis

IMPLEMENTATION DATE

Pre-1987

PROGRAM

LET Y1 = EXPONENTIAL RANDOM NUMBERS FOR I = 1 1 100 LET A1 = LOWER HINGE Y1