MEAN PLOT

PURPOSE
Generates a subsample mean versus subsample index plot.

DESCRIPTION
The subsample mean is the mean of the data in the subsample. The mean plot is used to answer the question: “Does the subsample location change over different subsamples?” The plot consists of:

- **Vertical axis** = subsample mean;
- **Horizontal axis** = subsample index.

In addition, a horizontal line is drawn representing the full sample mean. The appearance of the 2 traces is controlled by the first 2 settings of the LINES, CHARACTERS, SPIKES, BARS, and similar attributes.

SYNTAX
MEAN PLOT <y> <x> <SUBSET/EXCEPT/FOR qualification>
where <y> is the response (= dependent) variable;
where <x> is the subsample identifier variable (this variable appears on the horizontal axis);
and where the <SUBSET/EXCEPT/FOR qualification> is optional.

EXAMPLES
MEAN PLOT Y X
MEAN PLOT Y X SUBSET X = 2 TO 20

DEFAULT
None

SYNONYMS
None

RELATED COMMANDS
- CHARACTERS = Sets the type for plot characters.
- LINES = Sets the type for plot lines.
- MEDIAN PLOT = Generates a median plot.
- MIDMEAN PLOT = Generates a midmean plot.
- MIDRANGE PLOT = Generates a midrange plot.
- TRIMMED MEAN PLOT = Generates a trimmed mean plot.
- WINDSORIZED MEAN PLOT = Generates a Windsorized mean plot.
- SD PLOT = Generates a standard deviation plot.
- BOX PLOT = Generates a box plot.
- XBAR CHART = Generates an xbar control chart.
- PLOT = Generates a data or function plot.

APPLICATIONS
- Exploratory Data Analysis

IMPLEMENTATION DATE
88/2
PROGRAM
SKIP 25
READ GEAR.DAT Y X
LINE BLANK DASH
CHARACTER X BLANK
XTIC OFFSET 0.2 0.2
Y1LABEL MEAN
X1LABEL SAMPLE ID
TITLE AUTOMATIC
MEAN PLOT Y X