TABULATE

PURPOSE
Generates several types of tabulations for one variable based on a second group identifier variable.

SYNTAX 1
TABULATE <tag1>   <SUBSET/EXCEPT/FOR qualification>
TABULATE COUNTS <tag1>   <SUBSET/EXCEPT/FOR qualification>
where <tag1> is a group identifier variable;
and where the <SUBSET/EXCEPT/FOR qualification> is optional.

This syntax generates counts of the number of times each distinct element in <y1> occurs.

SYNTAX 2
TABULATE MEANS <y1> <tag1>   <SUBSET/EXCEPT/FOR qualification>
where <y1> is a response variable;
    <tag1> is a group identifier variable;
and where the <SUBSET/EXCEPT/FOR qualification> is optional.

This syntax divides <y1> into groups based on the <tag1> variable (i.e., all elements having the same value for <tag1> are placed in the same group). The mean of the elements in <y1> is then calculated for each of these groups.

SYNTAX 3
TABULATE RANGE <y1> <tag1>   <SUBSET/EXCEPT/FOR qualification>
where <y1> is a response variable;
    <tag1> is a group identifier variable;
and where the <SUBSET/EXCEPT/FOR qualification> is optional.

This syntax divides <y1> into groups based on the <tag1> variable (i.e., all elements having the same value for <tag1> are placed in the same group). The range of the elements in <y1> is then calculated for each of these groups.

SYNTAX 4
TABULATE SD <y1> <tag1>   <SUBSET/EXCEPT/FOR qualification>
where <y1> is a response variable;
    <tag1> is a group identifier variable;
and where the <SUBSET/EXCEPT/FOR qualification> is optional.

This syntax divides <y1> into groups based on the <tag1> variable (i.e., all elements having the same value for <tag1> are placed in the same group). The standard deviation of the elements in <y1> is then calculated for each of these groups.

EXAMPLES
TABULATE Y1
TABULATE COUNTS Y1
TABULATE MEANS Y1 TAG
TABULATE RANGE Y1 TAG
TABULATE SD Y1 TAG

NOTE
The STATISTIC PLOT can be used to generate a tabulation for additional statistics not supported here. The following example generates a tabulation for the median.

```
SKIP 25
READ GEAR.DAT Y ID
MEDIAN PLOT Y ID
LET MED = YPLOT
LET GROUP = XPLOT
RETAIN MED GROUP SUBSET TAGPLOT = 1
```

The variable MED and GROUP contain the values of the median and the group identifier respectively. See the documentation for the STATISTIC PLOT command for a list of supported statistics.

DEFAULT
None

SYNONYMS
None

RELATED COMMANDS

CROSS TABULATE	=	Generate a cross tabulation.
ANOVA	=	Carries out an ANOVA.
BOX PLOT	=	Generate a box plot.
MEAN PLOT	=	Generate a mean (vs. subset) plot.
RANGE PLOT	=	Generate a range (vs. subset plot.
SD PLOT	=	Generate a standard deviation (vs. subset) plot.
COUNTS PLOT	=	Generate a counts (vs. subset) plot.

APPLICATIONS
Exploratory Data Analysis

IMPLEMENTATION DATE
88/9

PROGRAM
SKIP 25
READ GEAR.DAT DIAMETER BATCH
TABULATE BATCH
TABULATE MEANS DIAMETER BATCH
TABULATE SD DIAMETER BATCH
TABULATE RANGE DIAMETER BATCH

The following output is generated.

```
 * COUNTS
*****************************
1.000000 * 10.000000
2.000000 * 10.000000
3.000000 * 10.000000
4.000000 * 10.000000
5.000000 * 10.000000
6.000000 * 10.000000
7.000000 * 10.000000
8.000000 * 10.000000
9.000000 * 10.000000
10.000000 * 10.000000
```

```
* MEAN
********************************
1.000000 * 0.998000
2.000000 * 0.999100
3.000000 * 0.995400
4.000000 * 0.998200
5.000000 * 0.991900
6.000000 * 0.998800
7.000000 * 1.001500
8.000000 * 1.000400
9.000000 * 0.998300
10.000000 * 0.994800


* STAN. DEV.
********************************
1.000000 * 0.004346
2.000000 * 0.005216
3.000000 * 0.003978
4.000000 * 0.003853
5.000000 * 0.007578
6.000000 * 0.009886
7.000000 * 0.007878
8.000000 * 0.003627
9.000000 * 0.004138
10.000000 * 0.005329


* RANGE
********************************
1.000000 * 0.014000
2.000000 * 0.018000
3.000000 * 0.013000
4.000000 * 0.011000
5.000000 * 0.022000
6.000000 * 0.032000
7.000000 * 0.028000
8.000000 * 0.010000
9.000000 * 0.013000
10.000000 * 0.020000
```