SUBSAMPLE

PURPOSE

Compute a subsample for a variable based on another index variable.

DESCRIPTION

The SUBSAMPLE command is similar to the BOOTSTRAP SAMPLE command. In either case, an index variable is generated (often with the DISCRETE UNIFORM RANDOM NUMBERS, BOOTSTRAP INDEX or JACKNIFE INDEX commands). This index variable contains integer entries into the original variable. For example, an index variable containing the values 3, 5, 1, and 8 refers to Y(3), Y(5), Y(1), and Y(8) where Y is the original data variable.

The distinction between SUBSAMPLE and BOOTSTRAP SAMPLE is that BOOTSTRAP SAMPLE expects the original variable and the index variable to be the same length while SUBSAMPLE allows the index variable to be smaller than the original variable. With SUBSAMPLE, the returned variable is the same length as the index variable. Index values less than 1 or greater than the size of the variable being sampled are ignored.

Both commands allow repeated values (i.e., sampling with replacement). This is determined by repeat values in the index variable.

SYNTAX

LET <resp> = SUBSAMPLE <var> <ind> <SUBSET/EXCEPT/FOR qualification>
where <var> is the variable being sampled;
<ind> is the index variable (size less than or equal to <var>);
<resp> is a variable (with the same length as <ind>) where the sampled values are returned;
and where the <SUBSET/EXCEPT/FOR qualification> is optional.

EXAMPLES

LET RES3 = SUBSAMPLE RES2 IND

DEFAULT

None

SYNONYMS

None

RELATED COMMANDS

BOOTSTRAP SAMPLE	=	Generate a bootstrap sample.
BOOTSTRAP INDEX	=	Generate a bootstrap index.
LOOP	=	Initiate a loop.
BOOTSTRAP PLOT	=	Generate a bootstrap plot.
JACKNIFE PLOT	=	Generate a jacknife plot.
JACKINFE INDEX	=	Generate a jacknife index.

APPLICATIONS

Jacknife analysis

IMPLEMENTATION DATE

89/2

PROGRAM

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. PERFORM A JACKNIFE ANALYSIS
LET Y = NORMAL RANDOM NUMBERS FOR I = 1 1 1OO
LOOP FOR I = 1 1 100
    LET IND = SEQUENCE 1 1 100
    LET IND(K) = 0
    LET JUNK = SUBSAMPLE Y IND
    LET YMEAN = MEAN JUNK
    LET Y0(K) = YMEAN
END OF LOOP
HISTOGRAM Y0
```