YATES OUTPUT

PURPOSE
Specify which sections of the output from the YATES ANALYSIS command are printed.

DESCRIPTION
The YATES ANALYSIS command estimates the factor effects in 2-level full factorial and fractional factorial designs. It yields factor estimates for all of the coefficients (main effects and all relevant interactions). The output from the YATES ANALYSIS command is divided into 3 sections:

1. Various summary statistics are printed;
2. The estimates of the factor effects are printed in standard order;
3. The estimates of the factor effects are listed in order from most statistically significant to least statistically significant.

As of the 92/7 version, the second section is no longer printed. This result occurs even if the analyst specifically requests that it should be printed with the YATES OUTPUT command.

SYNTAX
YATES OUTPUT <1/2/3/12/13/23/123>
where any of the above choices containing “1” will print section 1, any containing “2” will print section 2, and any containing “3” will print section 3.

EXAMPLES
YATES OUTPUT 1
YATES OUTPUT 3
YATES OUTPUT 13

NOTE
Since section 2 output is no longer printed, specifying YATES OUTPUT 2 is equivalent to suppressing the output from the YATES ANALYSIS command (a few summary lines are still printed).

DEFAULT
All factor estimates are printed.

SYNONYMS
None

RELATED COMMANDS
YATES ANALYSIS = Carries out a Yates analysis.
YATES CUTOFF = Specify which factor effects are printed from the YATES ANALYSIS command.

APPLICATIONS
Design of Experiments

IMPLEMENTATION DATE
89/12
PROGRAM

. THIS IS AN EXAMPLE OF A YATES ANALYSIS
. OF A 2**3 FULL FACTORIAL DESIGN.
SKIP 25
READ BOXSPRIN.DAT Y X1 X2 X3
SKIP 0
YATES Y
YATES OUTPUT 1
YATES Y
YATES OUTPUT 3
YATES Y

The following output is generated.

  ***************
** YATES Y **
  ***************

  **********************
**  2**K DEX FIT  **
  **********************

(NOTE--DATA MUST BE IN STANDARD ORDER)
NUMBER OF OBSERVATIONS = 8
NUMBER OF FACTORS = 3
NO REPLICATION CASE

PSEUDO-REPLICATION STAND. DEV. = 0.70710676908E+00
PSEUDO-DEGREES OF FREEDOM = 1
(THE PSEUDO-REP. STAND. DEV. ASSUMES ALL
3, 4, 5, ...-TERM INTERACTIONS ARE NOT REAL,
BUT MANIFESTATIONS OF RANDOM ERROR)

STANDARD DEVIATION OF A COEF. = 0.50000000000E+00
(BASED ON PSEUDO-REP. ST. DEV.)

GRAND MEAN = 0.71250000000E+02
GRAND STANDARD DEVIATION = 0.13719120979E+02
99% CONFIDENCE LIMITS (+-) = 0.31828401566E+02
95% CONFIDENCE LIMITS (+-) = 0.63531083131E+01
99.5% POINT OF T DISTRIBUTION = 0.63656803131E+02
97.5% POINT OF T DISTRIBUTION = 0.12706216812E+02

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NOTE--TAG, COEF, TCOEF, RESSD, & CUMULATIVE RESSD
WRITTEN TO FILES DPST1F.DAT AND DPST2F.DAT

**********************
** YATES OUTPUT 1 **
**********************

THE YATES SWITCH HAS JUST BEEN SET TO 1

******************************
** 2**K DEX FIT **
******************************

(NOTE--DATA MUST BE IN STANDARD ORDER)
NUMBER OF OBSERVATIONS = 8
NUMBER OF FACTORS = 3
NO REPLICATION CASE

PSEUDO-REPLICATION STAND. DEV. = 0.70710676908E+00
PSEUDO-DEGREES OF FREEDOM = 1
(THE PSEUDO-REP. STAND. DEV. ASSUMES ALL
3, 4, 5, ...-TERM INTERACTIONS ARE NOT REAL,
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GRAND MEAN = 0.71250000000E+02
GRAND STANDARD DEVIATION = 0.13719120979E+02

99% CONFIDENCE LIMITS (+-) = 0.31828401566E+02
95% CONFIDENCE LIMITS (+-) = 0.63531084061E+01
99.5% POINT OF T DISTRIBUTION = 0.63656803131E+02
97.5% POINT OF T DISTRIBUTION = 0.12706216812E+02

NOTE--TAG, COEF, TCOEF, RESSD, & CUMULATIVE RESSD
WRITTEN TO FILES DPST1F.DAT AND DPST2F.DAT

**********************
** YATES OUTPUT 3 **
**********************

THE YATES SWITCH HAS JUST BEEN SET TO 3

******************************
** YATES Y **
******************************
YATES OUTPUT Support Commands

** 2**K DEX FIT  **

(NOTE--DATA MUST BE IN STANDARD ORDER)
NUMBER OF OBSERVATIONS = 8
NUMBER OF FACTORS = 3
NO REPLICATION CASE

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NOTE--TAG, COEF, TCOEF, RESSD, & CUMULATIVE RESSD
WRITTEN TO FILES DPST1F.DAT AND DPST2F.DAT