Program Name: **bi2diffac**

Language: SAS

Objective: Determining a corrected nominal significance level for the large-sample solution to the problem of testing for equivalence with respect to the difference of the success probabilities in the two-sample setting with binomial data

Input:

ALPHA	significance level
M	sample size for Group 1
N	" " " " " 2
DEL1	absolute value of the lower limit of the equivalence range for $\delta=p_1-p_2$
DEL2	upper limit of the equivalence range for $\delta=p_1-p_2$
SW	horizontal and vertical distance between adjacent points of the grid in the parameter space of (p_1,p_2) to be searched through for the maximum rejection probability under the null hypothesis
TOLRD	smallest horizontal and vertical distance of any point in the search grid from the boundary of the parameter space
TOL	target difference between α and the effective size of the level-corrected test
MAXH	maximum number of interval-halving steps

Output:

ALPHA	value read from input file
M	" " " " " " "
N	" " " " " " "
DEL1	" " " " " " "
DEL2	" " " " " " "
SW	" " " " " " "
TOLRD	" " " " " " "
TOL	" " " " " " "
MAXH	" " " " " " "
NH	number of interval-halving steps carried out
ALPHA0	corrected nominal significance level
SIZE0	size of the test at nominal level ALPHA0
ERROR	character string with possible values 'none' [<=> no violation of the basic conditions that (1) each section of the rejection region must exhibit the form of an interval and (2) the size of the critical region is attained on the common boundary of both hypotheses] and '!!!!' [<=> violation occurred]