

Program Name: **srktie_m**

Language: SAS

Objective: Generalized signed rank test for equivalence allowing for tied data, computation of the test statistic and its critical upper bound from grouped intraindividual differences

Input:

W span of the grid of points covering the set of values taken on by the intraindividual differences D_1, \dots, D_n
N sample size
ALPHA significance level
EPS1 distance from 1/2 of the left-hand endpoint of the equivalence range for $q_+/(1-q_0) \equiv P[D_i + D_j > 0]/P[D_i + D_j \neq 0]$
EPS2 distance from 1/2 of the right-hand endpoint of the equivalence range for $q_+/(1-q_0)$
PATH full pathname of the file containing the set of raw data

Output:

N value read from input file
ALPHA " " " " " " "
EPS1 " " " " " " "
EPS2 " " " " " " "
U_PL observed value of the U -statistic estimator of q_+
U_0 " " " " " " " " " " " " " " " " q_0
UAS_PL estimate of $q_+/(1-q_0)$
TAUHAS estimated standard error of $\sqrt{n} U_+/(1-U_0)$
CRIT critical upper bound to the absolute value of the centred, standardized test statistic
REJ indicator of the decision to be taken [REJ=1 \Leftrightarrow rejection of the null hypothesis of inequivalence; REJ=0 \Leftrightarrow acceptance of H]