

Program Name: **srktie_d**

Language: SAS

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

Input:

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]