QCALC/3000

QUICK CALCULATION

by:

Earl E. Colmer, Jr.

Automated Sciences Group, Inc.

QCALC/3000 - QUICK CALCULATION

QCALC/3000 is a multi-function ASCII string calculator that displays your answer in ASCII scientific notation. QCALC consists of two programs: QCALCR, and QCALCL. QCALCR is accurate to 6.9 decimal places while QCALCL is accurate to 16.5 decimal places.

QCALCR and QCALCL allow the user 26 registers, known as equate variables (A-Z), 7 operators (+, -, *, /, ¯, !, ?), hierarchy (), 11 functions (Cosc, Cosh, Sinc, Sinh, Tanc, Tanh, Logc, Logn, Atan, Absv, Rand), and equation storage and recall. Command interpreter includes: Redo, Debug (Program Debug), :Debug (MPE Debug), MPE Commands, Exit. Both programs include an interactive 'FOR' loop which can take a function from the starting value/variable, increment it by the increment value/variable, and check it against the limit, which can also be a value or a variable.

Both QCALCR and QCALCL contain an 'ENTRY POINT' which allows the user to store QCALC commands into a file and have the results written to another file (default = $STDINX, $STDLIST). This allows either calculator to be created as a 'SON PROCESS', which can perform calculation after which it reactivates the father process. This technique is very useful in plotting programs. Your plot program never needs to be recompiled because your function can be accepted at run time, and passed to the son calculator.

Source programs may be purchased upon written request, but A.S.G., Inc. will retain all sales rights!

Example of Equate: $A=B=C;D=2;E=3;F=3.14E+00$

Example of String: $((A+B/2.3)-(F¯2)*8E-2)$

Example of For Loop: $A*COSC(X=1/B/.5/)$ [;SHOW]

Example of Equation=: $EQUATION=((A+B/2.3)-(F¯2)*8E-2)$

Example of Equation: EQUATION