Null Space

The program finds a base for the null space of a real valued $m \times n$ matrix. The calling statement is

$$nullsp(mat, \,''out\,'')$$

where mat is the matrix and out is the name of a variable in which the program will deliver a matrix whose columns form a base for the mull space of mat
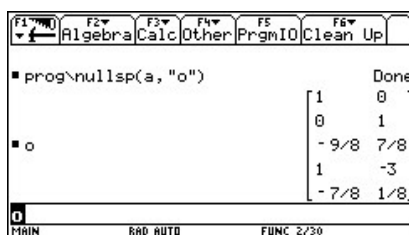
Example. We store in a the matrix

$$a = \begin{bmatrix} 3 & 1 & 2 & 1 & 2 \\ 1 & 2 & -3 & 0 & 5 \\ 2 & -1 & 5 & 1 & -3 \\ 1 & 2 & 1 & 1 & 1 \end{bmatrix}$$

Then we run the program using the instruction

$$nullsp(a, \,''o\,'')$$

The following screen show the result of the computation.

The screen shows
$$prog\backslash nullsp(a, \,''o\,'')$$

because in my calculator the program $nullsp$ is stored in the folder $prog$.