17. UTILITY PROGRAMS

There are several helpful utility programs available on the Advan BASIC disks. To use them, first insert the Master disk into drive 1 and then type EXEC followed by a space and then the program name. Remember that any program you have in memory will be erased when you execute one of these utility programs. So if you don't want to lose a program in memory, save it.

CLEAN.COD

As you enter a program, Advan BASIC converts it to token form. For example, each command and most variables are assigned single byte codes, reducing the amount of room needed to save a program. In addition, a list is created of the variables entered. If a program is modified, a given variable may no longer be needed, but the variable is still in the variable tables. Also, other unused variables might be created if errors are made in entering lines.

As long as the maximum number of variables (255) is not exceeded, the unused variables will not cause problems and will not affect the length of the compiled program. They will, however, take up extra space on the disk and in the computer during a compile, although the difference is usually not great. Executing CLEAN.COD will produce a new file with the unused variables removed.

STATPROG.COD

This program finds the program length (not including data length), the number of program lines, and the number of variables used. It will also tell you how many unused variables are in the variable table (see CLEAN.COD for information on unused variables). One quite useful function of STATPROG.COD is to check if a variable has been used only once. This can happen if you misspell a variable name. Sometimes these errors are hard to spot; if STATPROG.COD finds one, it will give you the variable name and line number.

CHECKSUM.COD

This program is helpful if you want to send a program listing to a friend or a magazine. Also it provides a valuable hard copy (on paper) backup for your important programs. CHECKSUM.COD allows you to print out a copy of a program with a checksum for each line. The checksum appears as a ! symbol followed by four characters. It also prints out the number of lines and a checksum for the whole program.

To produce a program listing with checksum data, insert the Master disk and type EXEC CHECKSUM.COD; then choose option 1. Note that the WIDTH system command can be used to set the printer width.

If someone wants to enter your program from the listing with the checksum data, he types it in and saves it to the disk. Next, he types EXEC CHECKSUM.COD and chooses option 2, which checks a program. After he inserts the program disk and gives the program name, CHECKSUM.COD will provide a count of the number of program lines. If this does not agree