TASORT Information Sheet
07/09/82

The Alternate Sort (TASORT) is designed for Model I and III TRS-80 tape and disk systems. Approximately 1000 bytes of memory are required by the program, depending on how many arrays you want to sort.

TASORT is designed to interact with Model I and III BASIC. The user is responsible for writing a small amount of BASIC code to pass parameters to the TASORT program. This is documented completely in the TASORT manual.

TASORT is compatible with all popular disk operating systems now on the market, including LDOS, Newdos/80 2.0, DOSPLUS, MultiDOS and TRSDOS, both Model I and III versions.

TASORT allows sorting of up to 65 individual arrays. You may specify whether sort is to be ascending, descending or tag-along (for each array). All types of arrays may be sorted, integer, single precision, double precision and string. TASORT does NOT allow sorting of Multiply-dimensioned arrays. We are considering a product to do this and invite interested users to present us with their multiply-dimensioned configuration and clearly explain how they want the sort to operate. Address information to TAS R & D, 704 North Pennsylvania Avenue, Lansing, MI 48906.

TASORT is completely relocatable. This is an automatic process. If your have no other machine language programs in high memory, it will move to the top of memory and protect itself there by loading the high memory address used by DOS (4049H in the Model I, 4411H in the Model III). If you do have a high memory machine language program, this program must also "protect" itself from TASORT by loading the high memory address. Most popular utilities automatically do this.

TASORT is an "in-memory" sorting program. The data to be sorted must be present in the computer's memory. If the data set to be sorted is larger than memory, the user must program additional BASIC statements to handle the larger data set.

The TASORT package includes test programs to demonstrate the actual BASIC code needed to access TASORT. They fill arrays with randomly generated values, sort them, and Disk BASIC versions display the elapsed sorting time. A 500 element array of any variable type sorts in 5 to 6 seconds. Arrays of 1,000 elements sort in 12 to 14 seconds, and 1,500 elements in 23-25 seconds. Four arrays of 1,000 elements each, sorted at one time but with two arrays in ascending order and two in descending order, take only a few seconds longer to sort than a single array does.

A feature of TASORT not found on any similar program (that we know of) is the ability to optionally treat null strings and/or numeric values of zero as being higher in sorted order than any other value. This allows null or zero records (usually records that have been deleted) to be sorted to the end, rather than the beginning, of a list of sorted items.

When ordering TASORT, please specify whether you want tape or disk. All versions are included on either media, since some people cannot access 40 track diskettes because of hardware limitations.

Direct all further inquiries and questions about TASORT to The Alternate Source, Customer Service, 704 North Pennsylvania, Lansing, MI 48906.