Subject: Re: What is the algorithms of sort function and where function? Posted by James Kuyper on Wed, 29 Mar 2006 15:08:12 GMT

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Daegal wrote:

> Hi, IDLers~

>

- > I want to know the algorithm which is used in sort and where.
- > How much fast is that functions comparing with C and Fortran functions
- > if there are similar functions in C and Fortran even if I don't know
- > that language at all.

I can't answer your main question, nor the implied side issue about Fortran. However, I can tell you about C. The C standard library does contain a sorting function, called qsort(). It's name is derived from the QuickSort algorithm. but the standard does not require that it actually use that algorithm. QuickSort is not an especially sophisticated algorithm, but there are algorithms that are a lot slower, and in theory you have no guarantee that qsort() doesn't use one of those slower algorithms. In practice, of course, you can reasonably expect that it does used the QuickSort algorithm.

I gather that much of IDL's source code is written in C; the SORT routine might use qsort().

Subject: Re: What is the algorithms of sort function and where function? Posted by Michael Galloy on Fri, 31 Mar 2006 01:14:11 GMT View Forum Message <> Reply to Message

kuyper@wizard.net wrote:

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Remember there isn't much "algorithm" to WHERE -- it just finds the indices of the elements which aren't zero.

SORT uses underlying system sorting routine and can be slightly different on the various platforms.

-Mike