Subject: are there any sorting routines?
Posted by qwerty on Tue, 23 May 2006 17:41:06 GMT
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...or:

consider Array<Array<int>> something;

so to sort it by number of elements in subarray...
(or some recursive prototype)

something like that.

in upp one never knows

regards

Subject: Re: are there any sorting routines?
Posted by mirek on Tue, 23 May 2006 19:36:35 GMT
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Sure. Guess what, it is called "Sort" (Or, if you need to retain ordering of equal items, "StableSort").

For your example, you will need to create ordering predicate - in common case, that is class with ordering operator()(T, T). Anyway, here what you need is ordering by GetCount method, therefore you can use

Sort(something, MethodRelation(&Array<int>::GetCount, StdLess<int>());

BTW, this is quite similar to STL, however one important difference is that in U++, Sort is guaranteed to work as long as T has defined IterSwap (no copy in necessary), and StableSort is guaranteed to work if there is any transfer operation (means, instead of deep copy, it is enough to have just pick). (BTW, one unresolved drawback is that at the moment, StableSort is unable to sort polymorphic arrays, anyway, that is quite corner case. And you can always use GetSortOrder.).

Mirek

Subject: Re: are there any sorting routines?
Posted by captainc on Wed, 25 Apr 2007 20:34:18 GMT
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Do you have an example of a custom class implementation that is capable of calling sort on? I need to see this in an example to get it correctly.

Much appreciated.

Subject: Re: are there any sorting routines?
Posted by mirek on Wed, 25 Apr 2007 20:50:04 GMT
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reference/Common or Ntl tutorial

In fact, all you need is some ordering predicate or operator< defined.

Mirek

Subject: Re: are there any sorting routines?
Posted by captainc on Thu, 26 Apr 2007 18:16:12 GMT
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I defined operator< in my class, but I am still receiving this error:

'error C2678: binary '<' : no operator found which takes a left-hand operand of type 'const VT'
...
while compiling class template member function 'bool Upp::StdLess<T>::operator ()(const T &, const T &) const
...

***Found a solution: I moved the definition/declaration outside the class and used a const function in the class to return the data to the operator< function.
