
Subject: Change in <Core/Sort.h> breaks my code
Posted by [Lance](#) on Sun, 08 Nov 2020 18:12:24 GMT
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I recently updated to 20111108 from a version that's about half year old, and encountered a compilation error. As I ponder about the error, it appears the new implementation of Sort__ in <Core/Sort.h> requires the Iterator class to supply a <= operator. While I don't know how the Iterator specification says, I believe it's probably better to revise the Sort__ code slightly to relieve the library user of the obligation to supply a <=, however trial it is.

```
void Sort__(l l, l h, const Less& less)
{
  int count = int(h - l);
  l middle = l + (count >> 1);    // get the middle element
  for(;;) {
    switch(count) {
      case 0:
      case 1: return;
      case 2: OrderIter2__(l, l + 1, less); return;
      case 3: OrderIter3__(l, l + 1, l + 2, less); return;
      case 4: OrderIter4__(l, l + 1, l + 2, l + 3, less); return;
      case 5: OrderIter5__(l, l + 1, l + 2, l + 3, l + 4, less); return;
      case 6: OrderIter6__(l, l + 1, l + 2, l + 3, l + 4, l + 5, less); return;
      case 7: OrderIter7__(l, l + 1, l + 2, l + 3, l + 4, l + 5, l + 6, less); return;
    }
    if(count > 1000) {
      middle = l + (count >> 1); // iterators cannot point to the same object!
      l q = l + 1 + (int)Random((count >> 1) - 2);
      l w = middle + 1 + (int)Random((count >> 1) - 2);
      OrderIter5__(l, q, middle, w, h - 1, less);
    }
    else
      OrderIter3__(l, middle, h - 1, less);

    l pivot = h - 2;
    lterSwap(pivot, middle); // move median pivot to h - 2
    l i = l;
    l j = h - 2; // l, h - 2, h - 1 already sorted above
    for(;;) { // Hoare's partition (modified):
      while(less(*++i, *pivot));
      do
        if(j <= i) goto done;
      *****
      *****SHOULD BE*****
      if(!(i<j) ) goto done;
      *****

      while(!less(*--j, *pivot));
```

```
IterSwap(i, j);  
}  
done:
```

Thank you!

Subject: Re: Change in <Core/Sort.h> breaks my code
Posted by [mirek](#) on Mon, 09 Nov 2020 11:53:22 GMT
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Sorry about that, not sure what I was thinking... :)

Now in trunk.

Mirek

Subject: Re: Change in <Core/Sort.h> breaks my code
Posted by [Lance](#) on Mon, 09 Nov 2020 15:43:12 GMT
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Thank you, Mirek!
