

Re: hc11 program help

Source: <http://coding.derkeiler.com/Archive/General/comp.arch.embedded/2004-03/0033.html>

From: Max (mtj2_at_btopenworld.com)

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On Sun, 29 Feb 2004 21:53:12 GMT, Anthony Fremont wrote:

>Interesting. I've seen websites that do indeed suport this claim. I
>saw reference to it for the first time in a Byte magazine article.
>As indicated here: <http://world.std.com/~jdveale/combsort.htm> and here
>http://en.wikipedia.org/wiki/Comb_sort

Hmmm. The authors of those Wikipedia pages don't seem to acknowledge the existence of "diminishing-interval sorting" as a class at all.

Odd.

>Shell is not referenced as having anything to do with its authorship at
>all.

Some historical stuff at NIST:

<http://www.nist.gov/dads/HTML/shellsort.html>

>Credit seems to go to Stephen Lacey and Richard Box.

I don't know – these young un's don't seem to realise there wuz computers around well before they were born ;o)

>It would

>appear that when refering to an insertion sort of decreasing comparison
>intervals, one should say Shell sort. However, when referring to a
>bubble sort with similar (same?) technique applied, it's a comb sort.

NIST say that comb sort is just another name for the diminishing interval sort, and credit Shell as the inventor:

<http://www.nist.gov/dads/HTML/diminishingIncSort.html>

Personally, I regard the comb sort as just a Shell sort with a different gap factor, and therefore a modification of an existing algorithm. It's a worthwhile improvement, but Shell should still be credited for the original invention.

In fact, it's a little hard to tell what is actually supposed to be original in this Lacey/Box algorithm, given that Knuth evaluated

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diminishing-interval with varying gap factors in his standard text on the subject, the second edition of which came out three years before the Byte article (and the first edition is circa 1980!). So, I'm going to ignore Wikipedia, and give the credit for comb sort to Shell and Knuth.

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Max