

# Re: Need help for a code in "Numerical Recipes in C++"

**Source:** <http://sci.tech-archive.net/Archive/sci.math.num-analysis/2005-01/0012.html>

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In article <cr3osr\$tn7\$02\$1@news.t-online.com>, Mok-Kong Shen <mok-kong.shen@t-online.de> wrote:

```
> The code of the heapsort algorithm as given in books by
> e.g. Sedgewick deals with arrays with indices in [1..n].
> For programming in languages like C, one would like to sort
> arrays with indices in [0..n-1]. I have found sofar only one
> book that gives code for the latter case, namely "Numerical
> Recipes in C++" by W. H. Press et al., which itself refers
> to Sedgewick. (Note that a companion book by the same authors
> for C has code for indices in [1..n], which is a bit odd in
> that context.)
> [Snip]
> void siftdown(int a[], int l, int r)
> { int j,jold,v;
> v=a[l];
> jold=l;
> j=l+1;
>   above should be j = 2*l+1;
> while (j<=r)
> { if (j<r && a[j]<a[j+1]) j++;
> if (v>=a[j]) break;
> a[jold]=a[j];
> jold=j;
> j=2*j+1;
> }
> a[jold]=v;
> }
>
> void hpsort(int a[], int n)
> { int i,t;
> for (i=n/2-1; i>=0; i--) siftdown(a,i,n-1);
> for (i=n-1; i>0; i--)
> { t=a[0]; a[0]=a[i]; a[i]=t;
> siftdown(a,0,i-1);
> }
```

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> }

>

Now it looks like a translation of hpsort() to C for int[]. The C++ code works There code works....