

# What produced this pseudocode?

Pseudo Code

Info

## heapSort/shiftDown

### shiftDown(list, current)

```
1 while( there has been a swap and current has at least one child )
2   if( current has only one child )
3     biggestChild = leftchild
4   else if( leftchild >= rightchild )
5     biggestChild = leftchild
6   else
7     biggestChild = rightchild
8   if( current > biggestChild )
9     swap(current, biggestChild)
```

### Variables:

current = 2

biggestChild = 4

In the sho file, there was a pseudocode tag (all on one line)

```
<pseudocode_url>fhtemp.php  
    ?line=8  
    &var[currentNode]=2  
    &var[biggestChild]=4</pseudocode_url>
```

# Where the file fhtemp.php looks like

```
<html>
<head>
<title>Program Listing</title>
<!-- you will need this style sheet declaration if you want red highlighting -->
<style>
  <!--
      @import url(../php_inc/program_listing.css);
  -->
</style>
</head>
<body>
<?php $file = 'heapDown.xml'; ?>
<?php include '../php_inc/program_listing.php'; ?> <!-- this is the only required tag -->
</body>
</html>
```

## And the file heapDown.xml looks like

```
<?xml version="1.0"?>
<pseudocode>
  <call_stack>heapSort/shiftDown</call_stack>
  <program_listing>
    <signature>shiftDown(list, current)</signature>
    <line line_number="1">1  while( there has been a swap and current has at least one child )</line>
    <line line_number="2">2    if( current has only one child )</line>
    <line line_number="3">3      biggestChild = leftchild</line>
    <line line_number="4">4    else if( leftchild &gt;= rightchild )</line>
    <line line_number="5">5      biggestChild = leftchild</line>
    <line line_number="6">6    else</line>
    <line line_number="7">7      biggestChild = rightchild</line>
    <line line_number="8">8    if( current &lt; biggestChild )</line>
    <line line_number="9">9      swap(current, biggestChild)</line>
  </program_listing>
  <variables>
    <variable>current = <replace var="currentNode" /></variable>
    <variable> biggestChild = <replace var="biggestChild" /></variable>
  </variables>
</pseudocode>
```

## When you're running in debug mode . . .

You must set the Webroot parameter for JHAVÉ to point to a Web directory where your php file lives.

Example (entire java command would be typed on one line):

```
java -jar jhave.jar -debug  
    -w http://www.uwosh.edu/av/avuserX/html_root/doc/some-dir
```

During this forum to copy directories/files to your space on www.uwosh.edu, use the URL

```
ftp://www.uwosh.edu
```

Then supply your username and password