

## Programming Project feedback

**Group:** No. 3

**Participants:** Deepa Patel

**Final Mark:** 91/100

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### General:

Variable types: Fine.

5/

5 Commenting and indentation: The comments are generally good, but those in MergeMacro and UsePivot do not make much sense to me. The indentation is fine.

3/5

**Subtotal: 8/10**

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### Sorting Procedures:

Step 0: Fine. You do not need to make A 2-dimensional, as it would be easier to set  
A(i)=Cells(i,1).Value  
but your code works.

5/5

Step 1: Fine.

10/10 Step 2: When A(j,1)>test you should not be swapping values, but instead overwriting A(j+1,1) with A(j,1). The rest is taken care of by the algorithm and the unnecessary swap will make your algorithm run more slowly.

7/10 Step 3: The Do While loop is redundant (but does not do any harm).  
10/10

Step 4: Fine.

10/10 Step 5: The Else line does nothing and can be omitted.  
9/10

Step 6: Fine.

5/5

Step 7: Fine.

10/10 Step 8: Should use  $n \setminus 2$  instead of  $n/2$ .  
9/10

**Subtotal: 75/80**

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### Commentary:

Your table is fine, and your explanation is very clear. However, you should have made it clear that at each step, after swapping the largest value to become the parent, you need to check that the

subtree starting at the new child is actually a heap. You do note that this is the case at the end, but it needs to be checked at each step (and if it is not a heap then you would have to do something extra).

**Subtotal: 8/10**