

Worksheet for Week 7 Tutorial Q2

Given an array of integers: `int[] arr = {1, 3, 6, 5, 2, 4, 7}`, we use the following enhanced bubble sort algorithm to sort the data in the array. Show the contents of the array `arr` at the end of each pass.

```
public static void bubbleSortEnhanced(int[] arr) {  
  
    boolean done = false;  
  
    for (int end = arr.length-1; end>0 && !done; end--) {  
        done = true;  
        for (int i = 0; i < end; i++) {  
            if (arr[i] > arr[i+1]) {  
                int temp = arr[i];  
                arr[i] = arr[i+1];  
                arr[i+1] = temp;  
                done = false;  
            }  
        }  
    }  
}
```

Show the contents of the array at the end of each pass. Use as many passes as necessary.

	arr[0]	[1]	[2]	[3]	[4]	[5]	[6]
	1	3	6	5	2	4	7
Pass 1	1	3	5	2	4	6	7
Pass 2	1	3	2	4	5	6	7
Pass 3	1	2	3	4	5	6	7
Pass 4	1	2	3	4	5	6	7
Pass 5							
Pass 6							