Many algorithms covered so far such as Kruskal's and Prim's are good examples of high-level instructions (instructions are clear, unambiguous that can be implemented using well known programming languages).  Heapsort, however, is not one of them.  Below is an example of high-level heapsort algorithm that sorts an array in ascending order.


Heapsort(Array A, int n+1) { //size of A[0..n] is n+1 to simplify code

       Array Temp; //temp array

       // heapify the array to build a max heap

       For i=1 to n

            Siftup(A, i);

       for i=0 to n {

            Temp[n-i] = A[0]; //remove the root and place it in temp

            A[0] = A[n-i]; //copy last value of heap to root. Heap now is array[0..n-i-1];

            Siftdown(A, 0, n-i-1); //rebuild the heap starting from root. Last value is n-i-1.
       }

       Return temp; //temp is A sorted in ascending order.

}