Heapsort Pseudo-Code

Max-Heapify(A, i)  
1 I = Left(i)  
2 r = Right(i)  
3 if I <= A.heap-size and A[l] > A[i]  
4 largest = j  
5 else largest = i  
6 if r <= A.heap-size and A[r] > A[largest]  
7 largest = r  
8 if largest != i  
9 exchange A[i] wth A[largest]  
10 Max-Heapify(A, largest)

Build-Max-Heap(A)  
1 A.heap-size = A.length  
2 for I = [A.length / 2] downto 1  
3 Max-Heapify(A, i)

Heapsort(A)  
1 Build-Max-Heap(A)  
2 for I = A.length downto 2  
3 exchange A[1] with A[j]  
4 A.heap-size = A.heap-size – 1  
5 Max-Heapify(A, 1)