# Homework 20241106
## Due Date: 20241112, 5 P.M.

1. Give an $O(n \lg k)$-time algorithm to merge $k$ sorted lists into one sorted list, where $n$ is the total number of elements in all the input lists. (*Hint:* Use a min-heap for $k$-way merging.)

2. Illustrate the operation of BUILD-MAX-HEAP on the array A = <3, 19, 80, 46, 78, 35, 23, 10 >, show the contents of A after two rounds of execution of the for-loop in HEAPSORT.

Chapter6.   6.27, 6.29