COP 3503 Honors – Homework 3 (Collaborative)

Due Date: October 6, 2021

1. (10 pts) Develop and algorithm that given an array A with n elements and an integer k <= n determines the k numbers in A that are closest to the median of A. Your algorithm should not use sorting.

2. (10 pts) Cormen et al., page 200, Exercise 8.3-2

3. (20 pts) Cormen et al., page 223, Exercise 9.3-8

4. (10 pts) Cormen et al., page 370, Exercise 15.1-3