University of Waterloo
CS240 Winter 2024
Assignment 4 Post-Mortem

General

- Some students had incorrect file name. Please make sure to have correct file, including `.pdf` extension. Moreover, make sure that your submission contains correct contents as well.
- Some students submitted their hand-written work, which is totally fine as long as it is legible.

Question 1

- Some students took a similar approach to Solution 3 which is totally fine. However, one detail that must be addressed was an issue with an algorithm that does less than $\frac{n(n-1)}{2}$ comparisons. Simply stating that such number of comparison is required is not sufficient and received some deductions.
- For those students whose approach was similar to Solution 1, it is important to include ceiling so that the expression can become integer. Missing ceiling received deductions.

Question 2

- This question was nicely done overall.
- For part b), some submissions did not adrress some important details and received deductions.

Question 3

- This question was nicely done.
- For part a), some students had reversed linked list in terms of order of elements. It must be that newer elements are at front of linked list in each cell.

Question 4

- This question was nicely done.
- For part d), some students took complement approach and did not subtract final probability from 1. Such mistake received some deductions.

Question 5

- Some students had "sliding window" approach. This approach does not work when there is negative number in the array. For example, if $m = 11$ and $A = [1, 9, 4, -2, 3]$, sliding window approach will miss the correct answer. This approach received deductions.

Question 6

- For part aii), some students did not use rounding box where its side length is not power of 2. Such mistake received some deductions.

Question 7

- For part b), some students colored nodes corresponding to p_0 and p_6 as topmost inside nodes. They are boundary node and such mistake received some deductions.