University of Waterloo
CS240E, Spring 2025
Assignment 4, Post Mortem

This document goes over common errors and general performance on the assignment. We create it using feedback from the graders, and it is meant to be used as a resource to understand common areas that we can improve in.

Q1

- Q1(a): Some solutions assumed the heap is stored in external memory consecutively, but it may not be stored that way.

- Q1(b): Many solution choose $d = B$ which left no space for storing the reference to the children.

Q2

- Many solutions forgot to add an sentinal-only layer at the top of the skip list.

Q3

- This question was well done.

Q4

- Q4(a)(c): Some solutions misunderstood the question, instead shifting i before checking, they alter the range after checking instead. As long as this was done correctly and didn't affect part (b)(d), this is not penalized.

Q5

- Q5(a): Most solutions got the correct probability for $P(h = h_0)$ and/or the correct formula for $E(h)$, but some of them didn't resolve the sum / simplify it correctly.