# University of Waterloo CS240 - Winter 2021 Assignment 3 Post Mortem

### Problem 1

• Q1c, students don't use the definition of Big Omega and just use h(T) = logn

#### Problem 2

- Q2b, students omit floor (they don't mention rightDescendants is an integer)
- Q2d, students don't explicitly use H is a non-decreasing function.

#### Problem 3

- Q3b, some don't know how to minimize the bound.
- For part(b), a few students leave it as a geometric sequence. Many students gave the theta bound instead of the exact formula.

#### Problem 4

- Q4d, students miss the justification for  $E(Vi) \leq 1$  and  $E(Vi) \leq np^i$ .
- Q4d, some got stuck on calculating the summation.

## Problem 5

• Generally well done.