

University of Waterloo
CS240 Winter 2025
Assignment 2 Post-Mortem

Question 1 [2+3+5=10 marks]

- For part a, many students only put either level 2 or 3 instead of listing both levels.
- Part b was generally well done.
- For part c, it was possible to create an algorithm with $\log \log(n)$ runtime. Most students provided an algorithm with $\log(n)$ runtime.

Question 2 [5 marks]

- This question was generally well done.

Question 3 [2+5=7 marks]

- Part a was generally well done.
- For part b, many students did not properly derive the recurrence relation for $T^{exp}(n)$ and instead wrote the relation directly.
- When deriving this recurrence relation, many students did not bound on the worst case input.

Question 4 [2+5=7 marks]

- This question was well done.

Question 5 [5 marks]

- Many students try to compare `almost-priority-queue` with concrete data structures from lectures.
- Many students provided a sorting algorithm that does not actually sort properly.

Question 6 [2+2+2+3=9 marks]

- This question was generally well done.