Question 1

- Some students used \(\text{(first (rest (rest mylist)))}\) instead of \(\text{(first (first (rest (rest mylist))))}\).

Question 2

- Many students missed constant substitution step. Given that code has been processed, all constant definition have to be simplified before substituting into expression.
- Some students incorrectly simplified cond expression.

Question 3

- Parameter names in a purpose was often missing. (Q3a)
- Extra test cases with a, b, c being the same number were common. (Q3b)
- Missing test cases when function should produce false. (Q3b)
- Duplicate tests cases. (Q3b)

Question 4a

- Some students tried to solve problem without using helper function which resulted in a generative solution.
- Many students were unfamiliar with the space character.
- Purpose and contract for helper function was frequently missing.

Question 4b

- Constant definition for ”@uwaterloo.ca” was often missing.
- Some students used string-append violating restrictions.
- Some students used \(\text{(list @ u w a t e r l o o . c a)}\) or something similar which is not a list of characters. Correct list of characters would be either using \#\ for each character or \(\text{(string→list ”@uwaterloo.ca”)}\).
- Some students did not use helper function to improve readability.
Question 5a

- For part a, many students missed contract for template function and accessed the \( (\text{second(} \text{first alst}) \) directly without any use of selectors.

Question 5b

- Many students had incorrect contract.
- Some students still confuse the use of \( \text{Nat/Int/Num} \) and used \( \text{Num} \) and \( \text{Int} \) instead of \( \text{Nat} \).
- \( \text{Str} \) was often missing in the contract.
- Some students did not send string argument in a recursive call.

Question 6

- A lot of students didn’t have empty as an element in the list. (Q6a)
- Many students had a vague purpose and some students did not include parameters name or the function header in the purpose. (Q3c)
- Some students failed to recognize the output type. (Q6c)
- Many students missed the requirement for the list’s length. (Q6c)

Question 7

- Some students used accumulative recursion which was not allowed.
- Purpose and contract for helper function was frequently missing.
- Many students incorrectly constructed the list.
- Some students used more than one helper function violating restrictions.