Post-Mortem
CS135 Winter 2022, Assignment 01
January 25, 2022

We normally publish the post-mortem for an assignment after it has been marked and released. Here is a list of common errors provided by the graders for assignment 1.

Parts of Q03 and Q04 were chosen to be marked for different style criteria. Thus, it is possible that other questions might have style problems that we did not address. There were also design recipe elements that we chose to give feedback on and not deduct for. You should still improve on these, since we may decide to deduct for them on a later assignment. Please review the posted solutions and style guide to help resolve any questions you may have. If that is insufficient, please raise your questions in 1-1 consulting hours.

Question 2 (functions)

Translations

• In part (c), many students used (expt (exp 1) ...) instead of (exp ...) or (expt e ...). We expect the latter.

• Many students did not define a constant for \( g \), the Earth’s gravity. Because the name of the constant was used in the height function, a direct translation should do the same. We did not deduct for this error in A1Q2, since design recipe was not required for this question, and hence the constant requirement was ambiguous. Normally, we do deduct for undefined/unused constants as we did in A1Q4.

• \( (/ \ 1 \ 2) \) was often used instead of the more correct \( 1/2 \). The latter is more correct because it is a value, not an expression.

• Similarly, \( 0.5 \) was often used instead of \( 1/2 \). The latter is more correct because it is precisely the same as in the given functions.

• Many students used other mathematically equivalent expression. We require the exact translation.

Question 3 (conversion)

Purpose, Contracts, and Examples

• Many students did not state the requirements that speed is non-negative and fuel efficiency (in mpg) is positive.

• Many students did not reference parameters, by the exact name, in their purpose statements.

• Many students wrote their purpose function headers incorrectly. The function header in a purpose should be identical to the header in the function’s definition.
Question 4 (grades)

Whitespace, Layout, Constants, and Names

- Many students did not define some or any significant constants. These include the weights of each grade (including the online variants), as well as the minimum grade to proceed to CS136.

- Some students placed constant definitions between design recipe elements. When defining constants, they should be placed above the design recipe of the function they are used in.