

# Inf2c-cs CW2 2022 Marking Report

## 1 Where Are the Marking Results?

Marking results of CW2 can be found in the github autograde action's run result. In student's latest commit there is either a checkmark or an "x" mark. Clicking on it shows the autograde action's run and points awarded for passing the autograde tests. The test file shows which tests passed, failed, and the raw number of marks awarded. Note that the raw number of marks does not include any late penalties which are applied by the ITO when marks are uploaded to Euclid. The rest of the document describes how CW2 was marked, the marking process, and statistics on the grades.

## 2 What Were the Test Cases?

The test cases used to grade CW2 were provided to students in the `.github` directory, where pushing solutions to their github repos would run the tests provided and students could see the result of running their tests on github.

The result of the tests were either directly compared with text of the expected output, or hashed and compared with a hash of the correct output. Tests for task 1, 2, 4, and the moderate task 5 test had their raw text output compared with expected raw text output. This was to ensure students could use these particular tests to check their output in order to find bugs. Other tests had their output hashed and compared with an expected output hash. The file that students are required to modify does not produce the output file that is checked in tests, ensuring students cannot directly print out the correct output.

Hashing the output of the simulator besides making it harder to directly print the correct output, also ensures students cannot blindly check the expected output of running their code against all tests and need to have some understanding of what it is their simulation is modeling. Some of the tests do have their output checked directly without hashing, and as mentioned in the previous paragraph were provided to ensure students could use them to debug the behaviour of their program.

### **3 How Was Marking Done?**

Bash scripts and github actions were used to fetch student git repositories and run their simulator code against the provided tests. Student repos were cloned locally and the tests from the .github repo would be run, where the results of the autograde run were used for submission to the ITO. The marking script additionally obtained the timestamp of the latest push. The final sum of all raw marks awarded and the latest push timestamp were provided to the ITO, where late penalties would be applied if applicable.

### **4 What Are the Marking Statistics?**

There were a total of 281 submissions. The mean of the raw marks was 83.47, the standard deviation was 29.26, and the median was 100.