Hands on portion:

TASK A:

A screenshot of a cell phone

Description automatically generatedValgrind curl checking cnn- there were no memory leaks because all the blocks were freed as can be seen in the screenshot

Valgrind checking wc:

there were no memory leaks because all the blocks were freed as can be seen in the screenshot

A screenshot of a cell phone

Description automatically generated

A screenshot of a cell phone

Description automatically generatedTASK B:

A screenshot of a cell phone

Description automatically generatedCppcheck results & valgrind results- here in the screenshot above we can see the cppcheck had an issue with the catch2 header file where there was a syntax error with the line “[pool drain]”. This syntax can be corrected by fixing the starting bracket before the pool. In the picture below you can see the valgrind results on the program; these show there were no memory leaks and all blocks were freed.

The picture below also tested the test.cc files and showed there was no memory lost.

A screenshot of a cell phone

Description automatically generatedA screenshot of a cell phone

Description automatically generatedCatch2 test cases: below is an output from the test cases, I showed 4 passing and 1 failing. The four passing cases tested to see if the correct output was reached for a certain input, as well as tested to see if the correct output was reached in case nothing was inputted. The last failing case was just to show that it was not hard coded in and it would not give random outputs when inputs were put in.