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CSE 210A - Programming Languages

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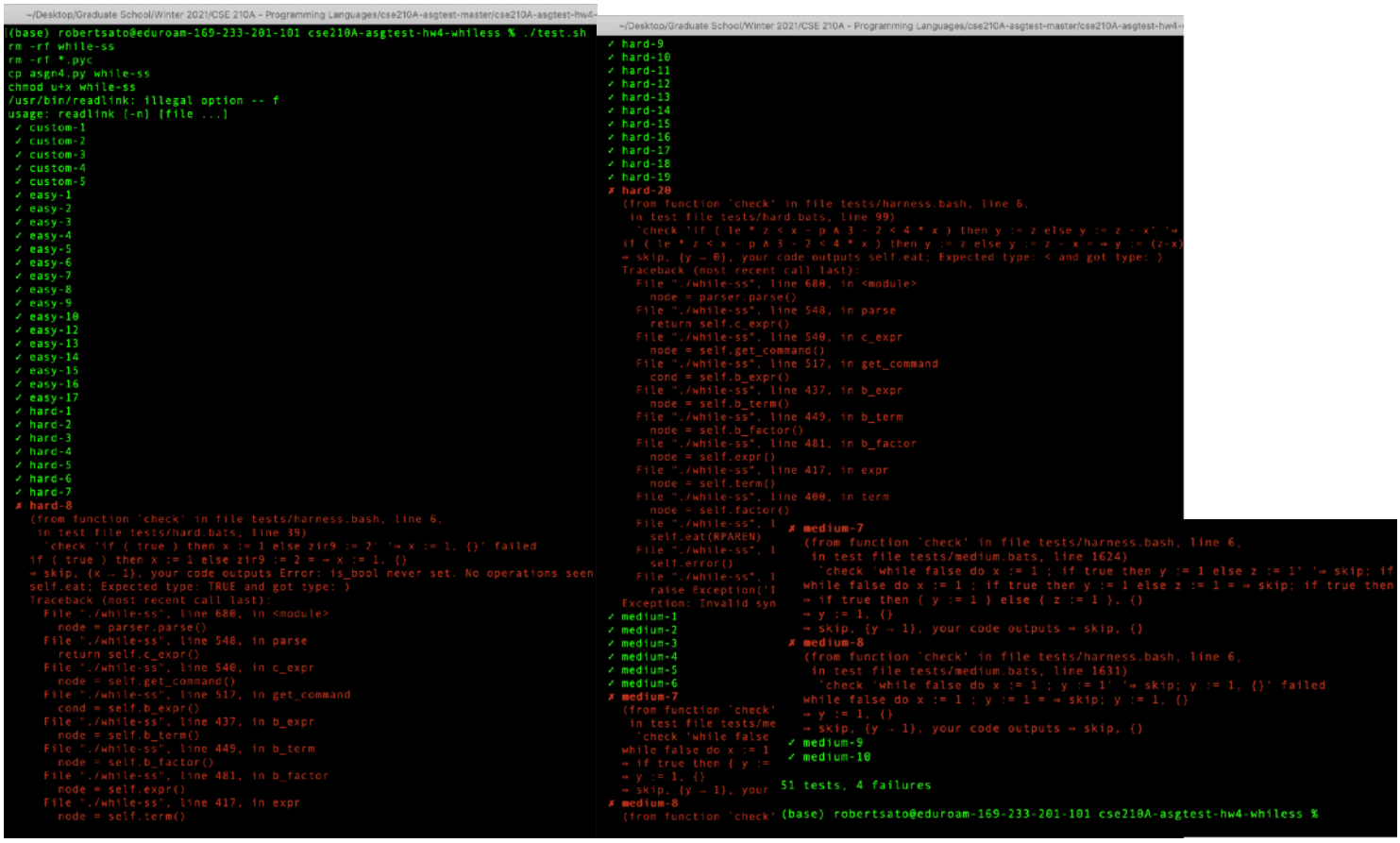
Homework 4: WHILE Small Step Interpreter



My implementation builds heavily from homework 2, the WHILE interpreter. The tokenizer and parser were virtually unchanged. The main changes involved logic for determining if a parenthesis belonged to a boolean or arithmetic expression, fixing issues with pre-existing parser logic, formatting of output, and interpreting the AST. Because this is a small step interpreter, we can no longer recursively visit tree nodes. Instead, I iteratively loop through one step of the interpreter at a time. The interpreter

returns the corresponding new state and store at each iteration. The same https://ruslanspivak.com/lsbasi-part7/ parser code was used for this implementation.