5.1 Extend the calculator to support the variables a, b, ..., z as variables different to A, B, ... Z.

We first double the memory allocation value since we will be able to have double the variables. We then include an if statement when writing an expression that detects if the variable is a capital letter or not, and adjusts the ascii value accordingly.

5.2 Create a suitable lexical analyzer with flex.

We first need to eliminate or comment what we did earlier and everything related to the yylex function. We then modify the lexical analyzer to allow both capital and lowercase letters.