Faults and Corrections

For this document, we will make a table that will show where we found faults based off of the tests we conducted and how we fixed the issue.

Function	Fault	Correction
is_char_constant	Fault was that there was an error with the bounds of the length for the string.	Fixed the fault by having the parameter of the if-statement changed to "str.length() == 2".
is_num_constant	Fault was found to be that one of the test cases "123" was out of range.	Fixed the fault by removing the '+1' in the nested if-statement of the function at line 311.
is_identifier	Fault is that the single letter case such as 'a' was considered false from the original method.	The return statements for true and false need to be swapped in order to count all cases correctly. Swapped return statements at lines 362 and 365.
is_spec_symbol	Fault was that the method left out an if-statement for the single quote.	Added an if-statement to remove the fault and account the quote special symbol.
print_spec_symbol	The fault was that there was a copy and paste error made by the developer and reused the right parentheses for the left one.	Fixed the fault by replacing the parentheses.
get_token	The fault occurs because it doesn't separate the characters in the string correctly and accounts for the empty spaces.	Removed and added some lines in the original method that fixes the issues of reading any special symbols and letters on its own.
token_type	The fault occurs when we check for identifiers. The values are mismatched.	Added assertfalse statements to account for the false outputs.
token_type	Single quote didn't pass the special symbol requirements	Fixed the issue in the is_spec_symbol method.
print_token	Printing outputs were a little different compared to what we tested. Printed out the other inputs along with what was being tested.	Fixed the console print statement and adjusted some errors in the test cases.

print_token	Fault found when there was an error with the character constant as it leaves out the '#' symbol for the type.	Fixed the print statement where it accounts for the # in the output and have the correct output displayed.
open_character_stream	Issues with putting the file name	Fixed the error in the print statement that accounts for the system.out outputs.
is_char_constant	Missing null case	Added null case
is_keyword	Missing null case	Added null case