Compiler Design Lab

Lab Assignment-3

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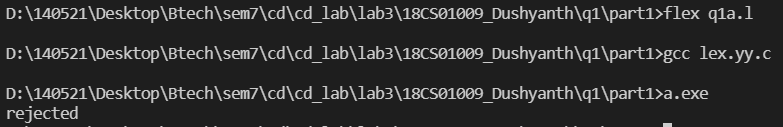
Section-1

Q 1.1 Write a LEX/Flex program that recognizes binary strings containing odd number of 0’s

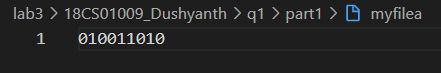
Input:



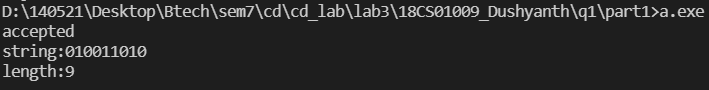
Output:



Input:



Output:

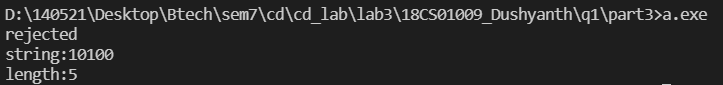


Q 1.3 Write a LEX/Flex program that recognizes binary strings whose integer equivalent is divisible by 3.

Input: (20=10100)



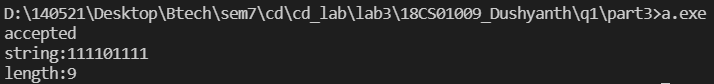
Output:



Input: (495=111101111; 495/3 = 165)



Output:



Section-2

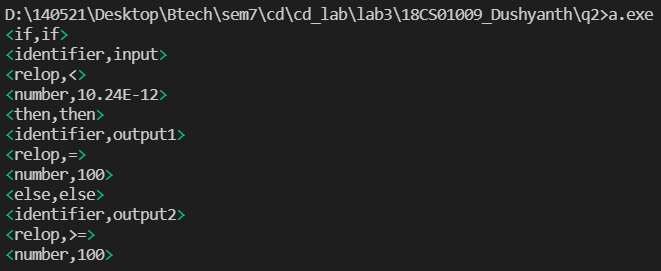
Q 2.1. Write a Lex/Flex program to describe the tokens of the above grammar, and generate a lexical analyzer using the Lex/Flex tool.

Q 2.2. Test the lexical analyzer with some input strings (You should show and explain the output of the lexical analyzer for the considered examples).

Input:



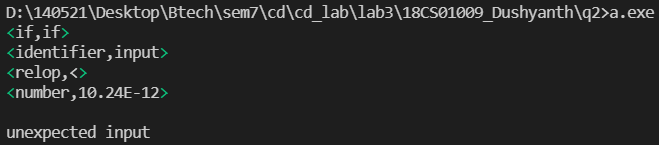
Output:



Token types considered: if, else, then, identifier, relop, number

Input: 

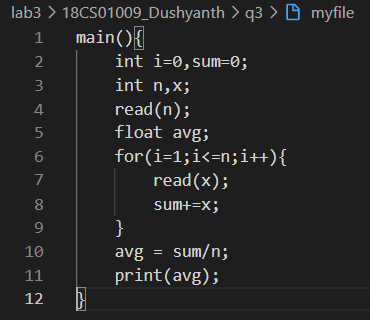
Output:



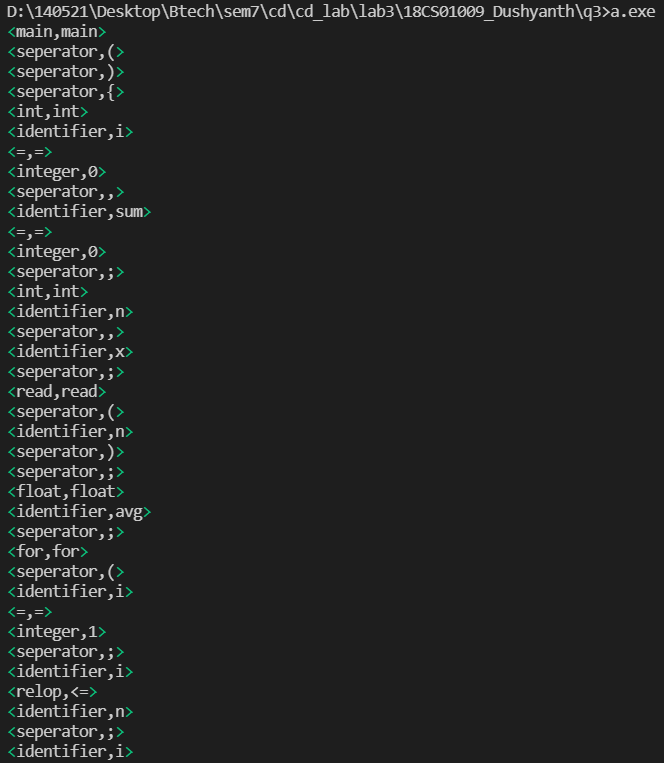
Section-3

Q 3. Construct a lexical analyzer for the following simple “C” like language using the Lex/Flex tool.

Input:



Output:

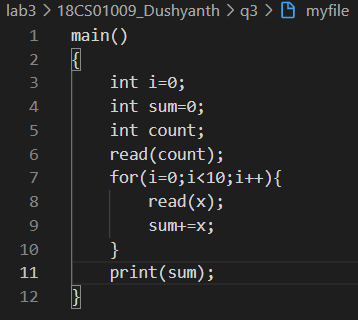




Token types considered are:

Int, float, separator, for, if, else, ++, --, arith\_op, op&assign, identifier, integer, floating\_point, =, relop, while, print, read

Input:



Output:

