

CSE 4130: Formal Languages and Compilers Lab [Spring 2020]

Final Project

Write a C program to read a source code in C from the console and print a report on the given source code. The report will contain the following:

1. The source code with line number
2. Any kind of error covered in Session 1 to Session 5
3. Header Files
4. Identifiers
5. Keywords
6. Functions

Note that your program will create an output file containing the report and display the report on the console as well.

Sample Input	Sample Output
<pre>#include<stdio.h> /*Program Starts*/ float func(int x) { int y;; for(y; x,){} //for loop return 1.5; } int main() { int a=1; if(c) a=2; else a=0; return 0; }</pre>	<p>Source code with line number:</p> <ol style="list-style-type: none">1. #include<stdio.h>2. /*Program Starts*/3. float func(int x)4. {5. int y;;6. for(y; x,){} //for loop7. return 1.5;8. 9. <p>Errors:</p> <p>At line number 3: Misplaced Parenthesis</p> <p>At line number 5:</p> <p>At line number 6:</p> <p>.....</p> <p>Header Files: stdio.h</p> <p>Identifiers: func, x, y,</p> <p>Keywords: float, int,</p> <p>Functions: func, main</p>