Compiler Design Lab (CS 511)
Autumn 2021

Assignment 2

Design a token recognizer for a C/C++ like program segment using Lex.
Output tokenized string(s) as shown below.
Your designed recognizer should at least handle the following tokens:

1. keyw: int, double, for, while, if, then, else, do
2. id: variable names
3. delim: `;' and `}' to understand end-of-statement and end-of-block respectively. Consider `,' also as a delimiter.
4. rel-op: { <, >, ==, <=, >=, != }
5. assign_op: =
6. arith_op: +, -, /, *
7. num: 123.12, 123, 0.12 etc.

** The analyzer should ignore redundant spaces, tabs, new lines, and comments.

Sample Input Output

Input:

```
int a, b, c;
int sum1, sum2, sum;
sum1 = a +b; /* get two sums */
sum2= b+ c;
sum = sum1+sum2+100;
```

Output:

```
<keyw><id><delim><id><delim><id><delim>
<keyw><id><delim><id><delim><id><delim>
<id><assign_op><id><arith_op><id><delim>
<id><assign_op><id><arith_op><id><delim>
<id><assign_op><id><arith_op><id><arith_op><num><delim>
```