Compiler Construction (CS 402)
Spring 2021 – Assignment 2
May 26, 2021

Given a Mini Pascal Language Grammar in a separate document, write a program in either C or C++ or Java or C# or Python, to generate a token list. The token list needs to be generated in a CSV format:

```
Token Type, Lexeme, Line Number, Position
```

Generate another file in CSV format for Symbol Table. The format is:

```
Identifier, Type
```

An example program for scanning could be:

```
program checkMyAbility;
var
      counter: integer;
      number: integer;
      factorial: integer;
      height : real;
      width : real;
      breadth : real;
      volume : real;

begin

      number := 6;
      counter := number;
      factorial := 1

      while counter > 0 do begin
          number := number * counter;
          counter := counter – 1;
      end;

      height := 8.5;
      width := 4.5;
      breadth := 2.25;
      volume := height * width * breadth;

      if volume >= 100 and number < 5 then begin
          volume := volume / 4;
      end
      else begin
          if volume >= 50 or number < 10 then begin
              volume := volume / 2;
          end
      end;


      write("Factorial of ");
```

```
        write(number);
        write(" is ");
        writeln(factorial);
        write("Some odd value is: ");
        writeln(volume);
end.
```