

```

1  //##### Compiler Design (1) #####
2  //##### Exp.1: File Tokenizer #####
3  //##### Coded by: Ahmed A. Alsamman #####
4  using System;
5  using System.IO;
6  namespace FileLexer
7  {
8      class Program
9      {
10         static void Main(string[] args)
11         {
12             string fileName = @"d:\source.txt";
13
14             if (File.Exists(fileName)) // Check if file already exists. If true
15                 then delete it.
16                 File.Delete(fileName);
17
18             //Create a file for writing
19             StreamWriter sw = new StreamWriter(fileName);
20             sw.WriteLine("void main ( )");
21             sw.WriteLine("{");
22             sw.WriteLine("int a");
23             sw.WriteLine("a = 3");
24             sw.WriteLine("}");
25             sw.Close(); // close the file
26
27             //Open the file for reading
28             if (File.Exists(fileName))
29             {
30                 StreamReader sr = new StreamReader(fileName);
31
32                 while (!sr.EndOfStream) //read until the end of file
33                 {
34                     string line = sr.ReadLine();
35                     int index = 0;
36                     string token = "";
37                     while (index < line.Length)
38                     {
39                         if (line[index] == ' ')
40                         {
41                             Console.WriteLine(token);
42                             token = "";
43                         }
44                         else
45                         {
46                             token += line[index];
47                             index++;
48                         }
49                         Console.WriteLine(token); //print the last token
50                     }
51                     sr.Close();
52                 }
53             }
54             else
55                 Console.WriteLine("File not exist!");
56         }
57     }
58 }

```