**Ain Shams University**

**Faculty of Engineering**

**Computers and Systems Engineering Department**

*Project 2*

# **(Systems Software CSE422)**

## Parser Project

|  |  |  |
| --- | --- | --- |
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## Parser Project

We used C# to build a GUI used to load any text file written by TINY language snippet code and then scanner it and convert grammar into EBNF form then parser it to generate a complete syntax tree.

Tokens of the TINY language

A screenshot of a computer

Description automatically generated

We open Scanner.exe

Graphical user interface, application, Word

Description automatically generated

Figure 1 scanner application

Then we can add any text file we need by pressing on “Load” button.

Graphical user interface

Description automatically generated

Figure 2 Load button

We will see that the context of file we loaded will appear in code textbox.

Graphical user interface, application, Word

Description automatically generated

Figure 3 GUI after add text file

if we press scan to define each part of code

Graphical user interface, application, Word

Description automatically generated

Figure 4 GUI after press scan button

if we press parse to draw syntax tree.

Graphical user interface, application, Word

Description automatically generated

**For Ex2**

Scan

Graphical user interface, application, Word

Description automatically generated

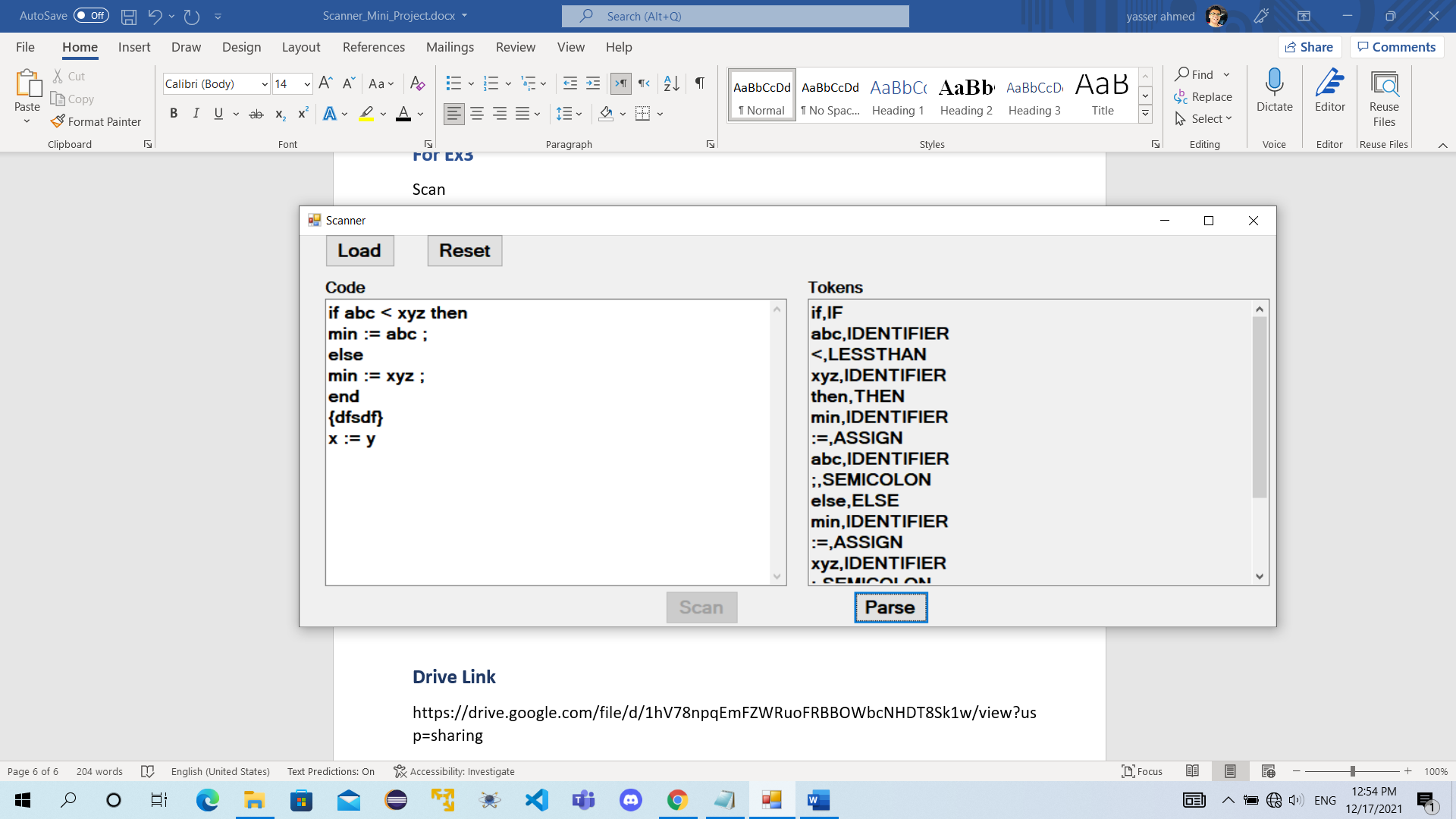
Parse

Graphical user interface, application, Word

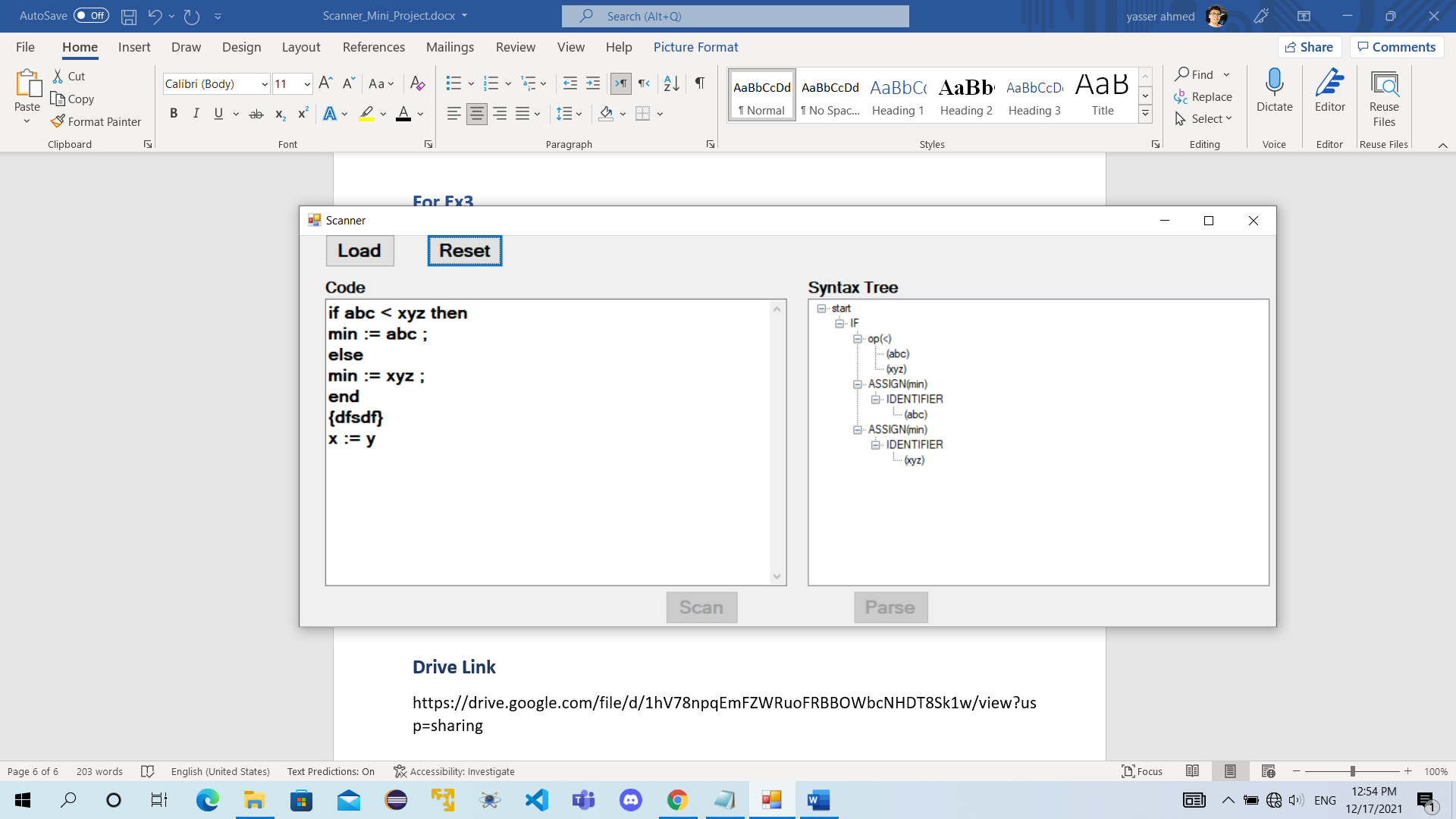
Description automatically generated

**For Ex3**

Scan



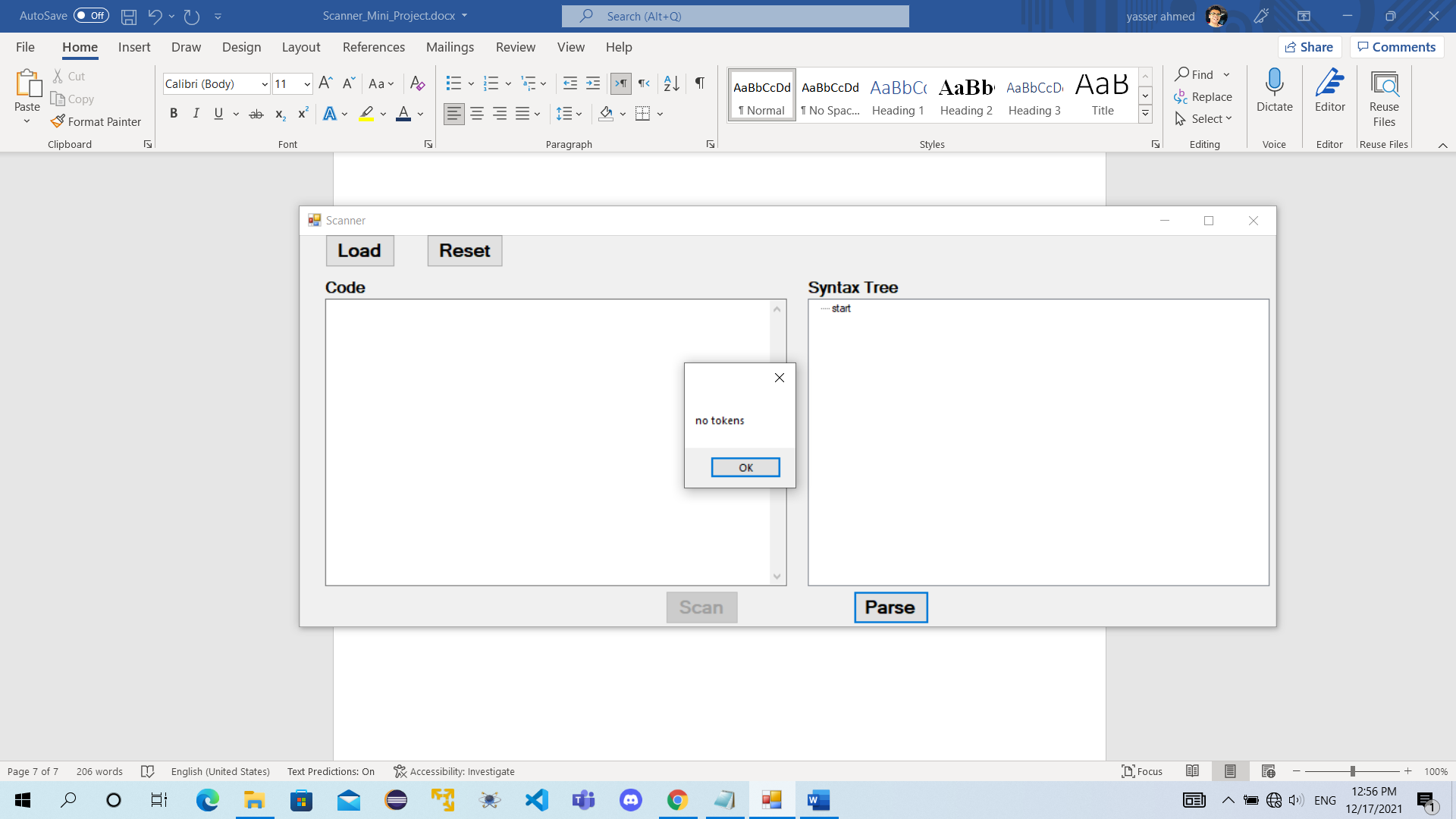
Parse



**Check Errors**

1. For no code and press parse

So the program will display a message “No tokens”



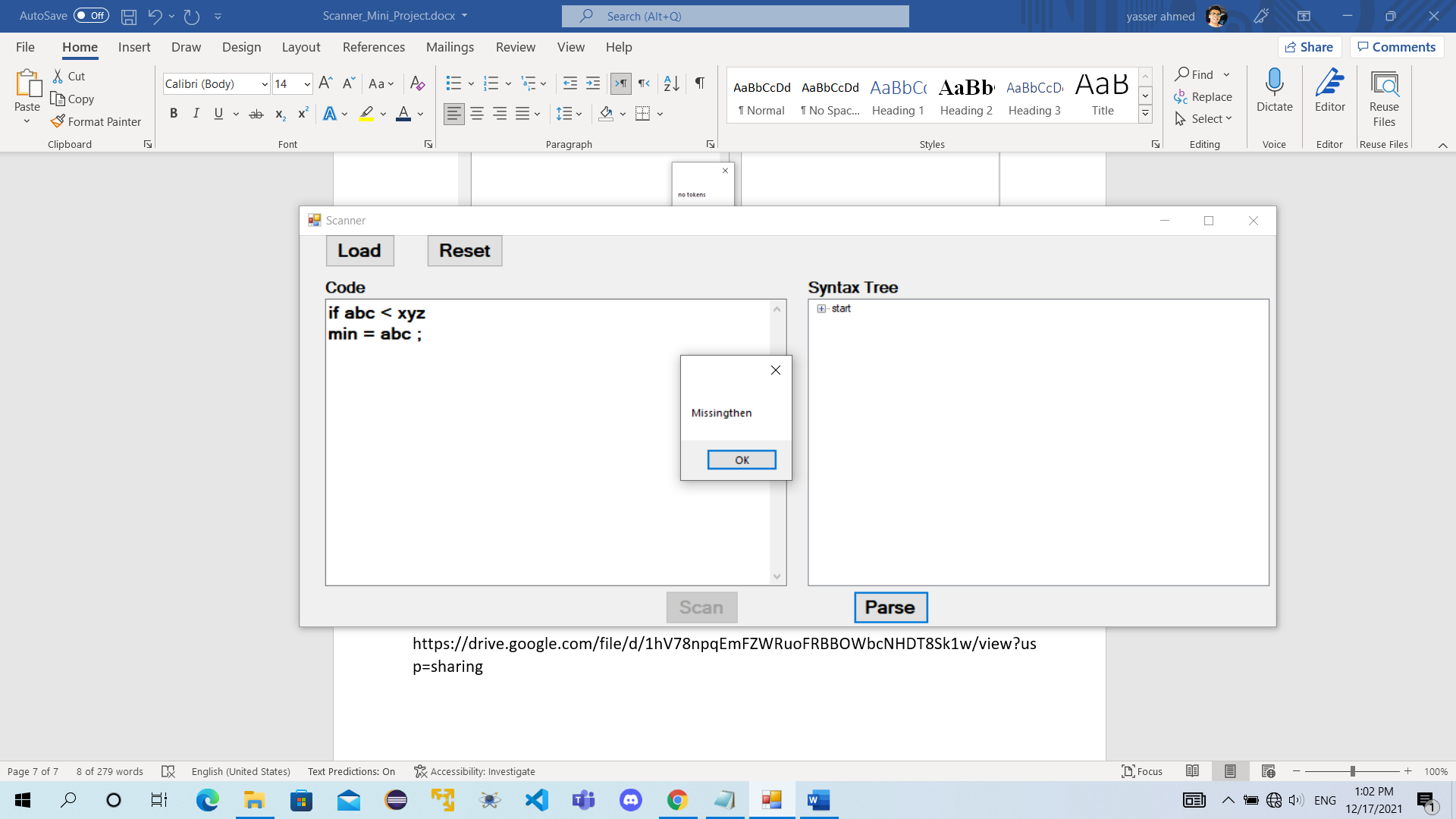
1. Check the syntax error of the tiny language

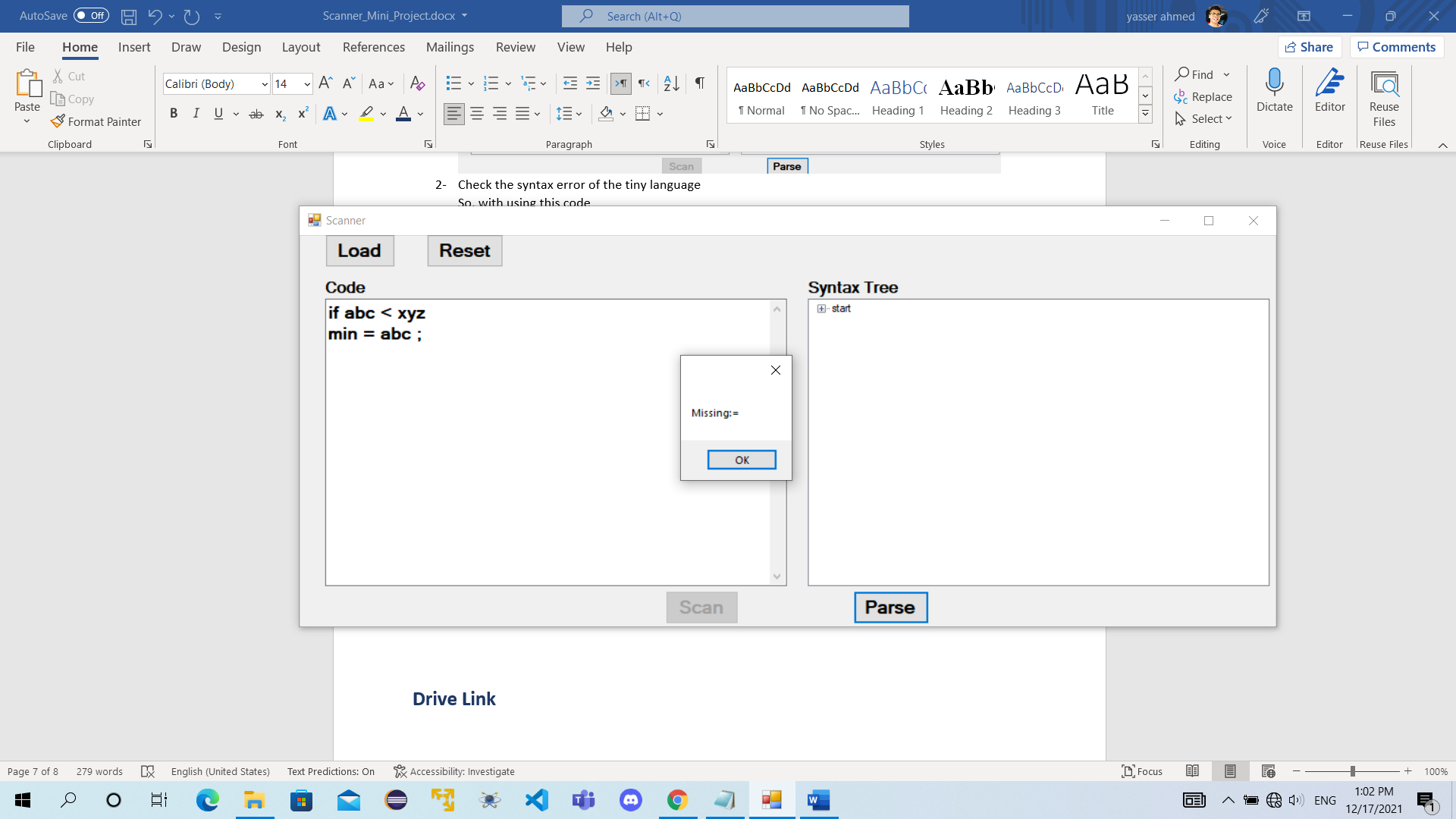
So, with using this code

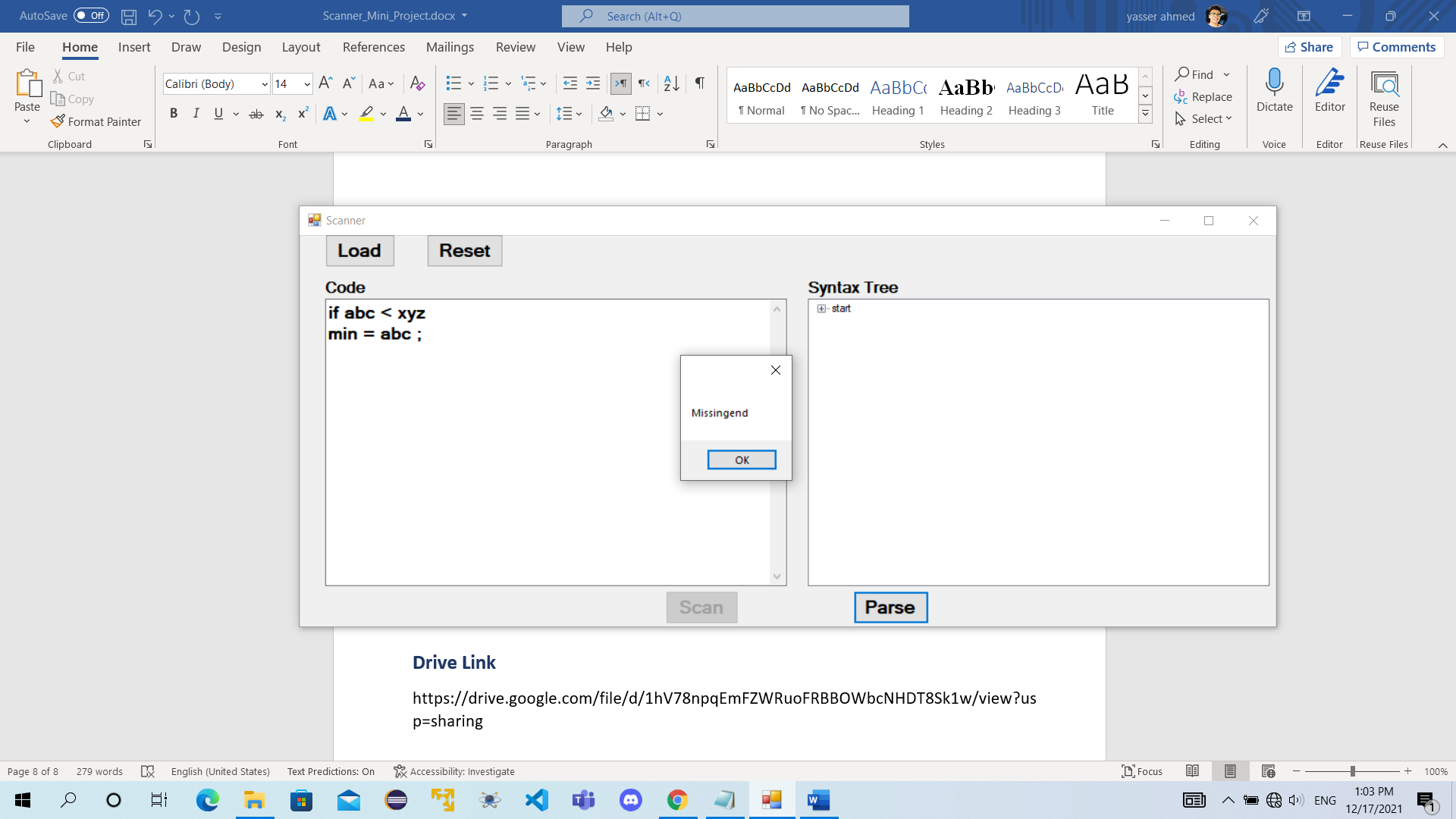
if abc < xyz

min = abc ;

* here in this code as we studied that before each = we need to put “:”.
* for each if condition we need to put “then” and “end” at the end of the code of if.







**Drive Link**

<https://drive.google.com/file/d/1U_xVVqNh17VbTpuwpQTJJO4m4ylSFi5T/view?usp=sharing>