AIM:

To implement grammar rules for control statements, and Loop control.

Niketkumar Kothari

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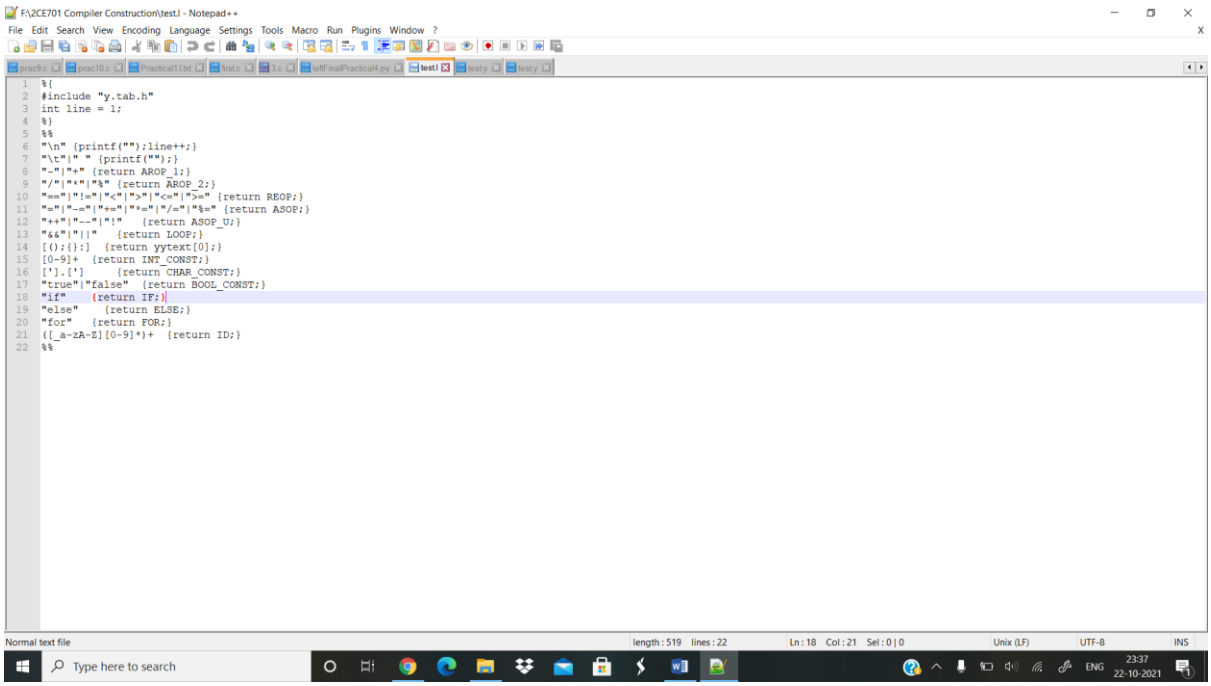
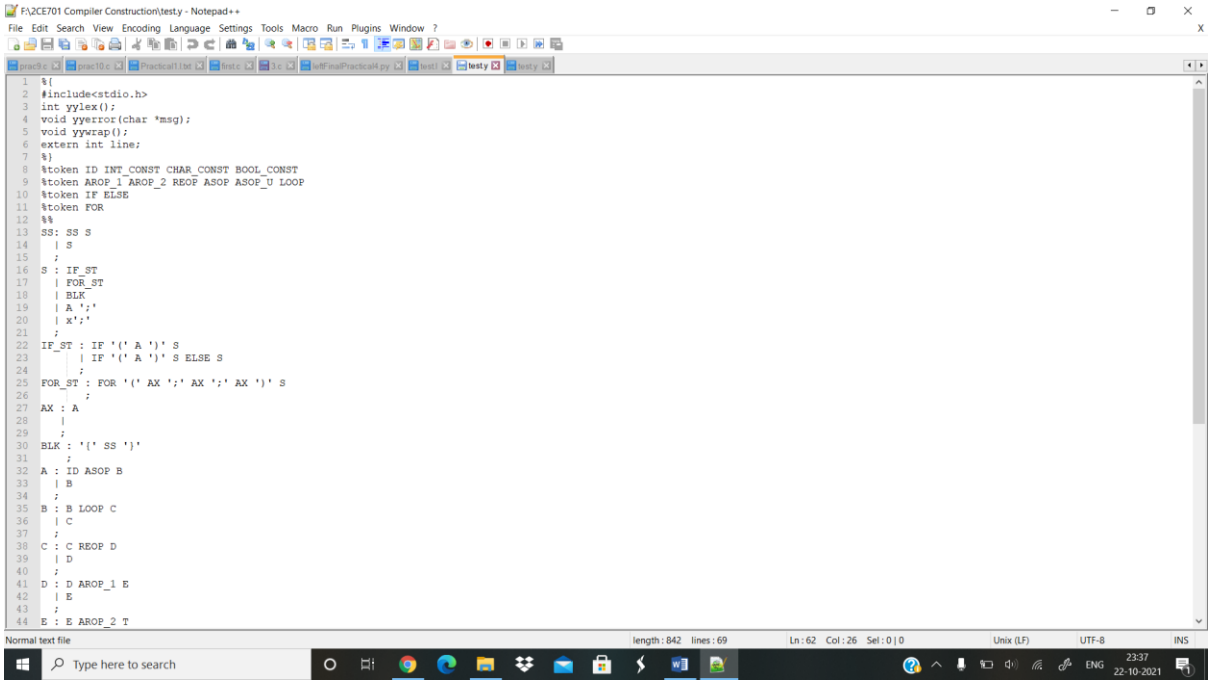
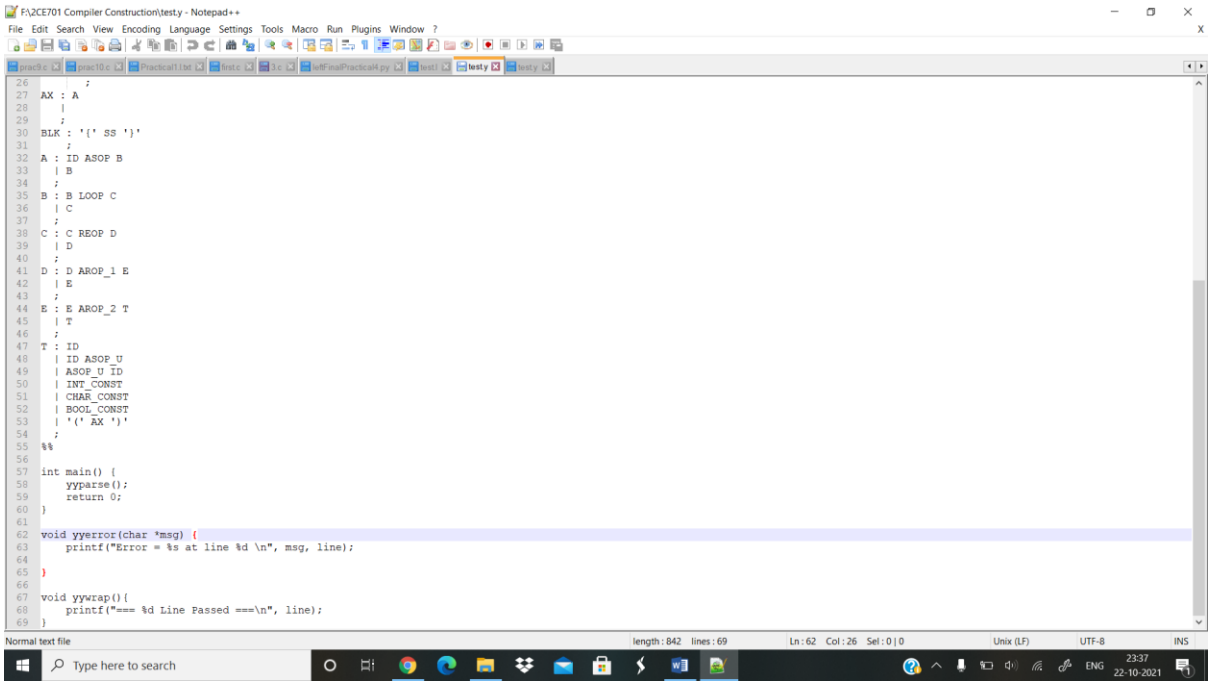
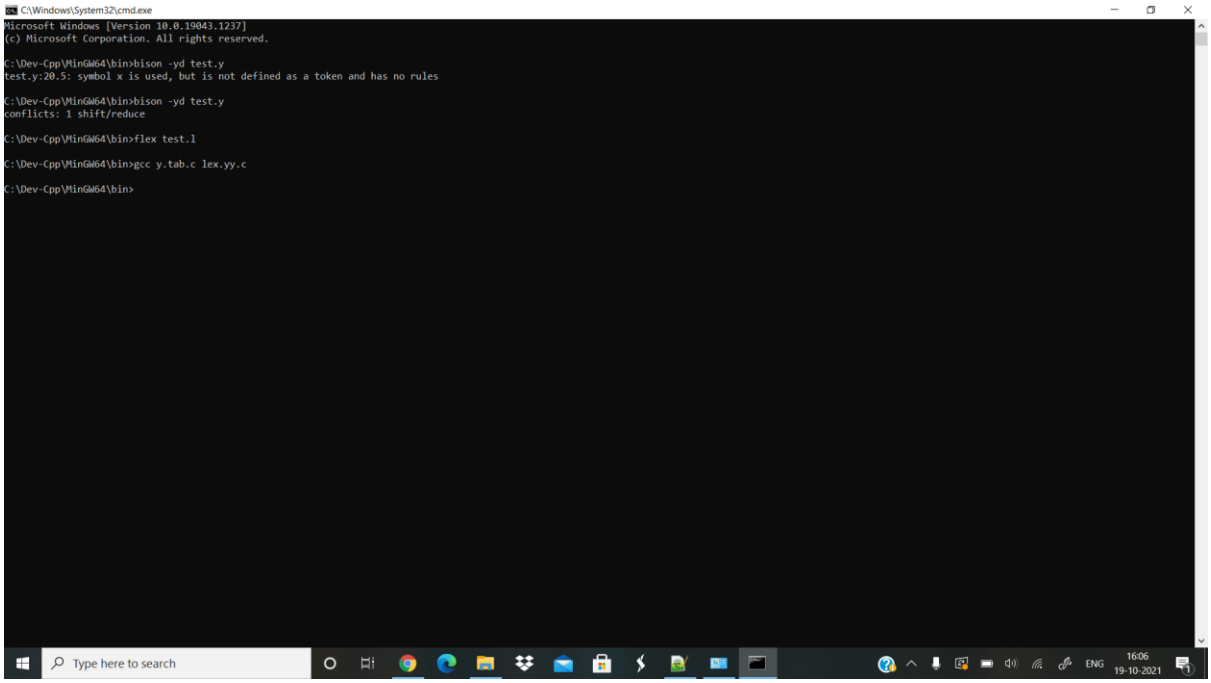



F:\2CE701 Compiler Construction\test.y - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
%{
#include<stdio.h>
int yylex();
void yyerror(char *msg);
void yywrap();
extern int line;
%}
%token ID INT_CONST CHAR_CONST BOOL_CONST
%token AROP_1 AROP_2 REOP ASOP ASOP_U LOOP
%token IF ELSE
%token FOR
%%
SS: SS S
| S
;
S : IF_ST
| FOR_ST
| BLK
| A ';'
| x';'
;
IF_ST : IF '(' A ')' S
| IF '(' A ')' S ELSE S
;
FOR_ST : FOR '(' AX ';' AX ';' AX ')' S
;
AX : A
|
;
BLK : '{' SS '}'
;
A : ID ASOP B
| B
;
B : B LOOP C
| C
;
C : C REOP D
| D
;
D : D AROP_1 E
| E
;
E : E AROP_2 T
Normal text file
length : 842 lines : 69
Ln : 62 Col : 26 Sel : 0 | 0
Unix (LF)
UTF-8
INS
Type here to search
ENG
23:37
22-10-2021


F:\2CE701 Compiler Construction\test.y - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
;
AX : A
|
;
BLK : '{' SS '}'
;
A : ID ASOP B
| B
;
B : B LOOP C
| C
;
C : C REOP D
| D
;
D : D AROP_1 E
| E
;
E : E AROP_2 T
| T
;
T : ID
| ID ASOP_U
| ASOP_U ID
| INT_CONST
| CHAR_CONST
| BOOL_CONST
| '(' AX ')'
;
%%
int main() {
yyparse();
return 0;
}
void yyerror(char *msg) {
printf("Error = %s at line %d \n", msg, line);
}
void yywrap(){
printf("=== %d Line Passed ===\n", line);
}
Normal text file
length : 842 lines : 69
Ln : 62 Col : 26 Sel : 0 | 0
Unix (LF)
UTF-8
INS
Type here to search
ENG
23:37
22-10-2021


C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.19043.1237]
(c) Microsoft Corporation. All rights reserved.
C:\Dev-Cpp\MinGW64\bin>bison -yd test.y
test.y:20.5: symbol x is used, but is not defined as a token and has no rules
C:\Dev-Cpp\MinGW64\bin>bison -yd test.y
conflicts: 1 shift/reduce
C:\Dev-Cpp\MinGW64\bin>flex test.l
C:\Dev-Cpp\MinGW64\bin>gcc y.tab.c lex.yy.c
C:\Dev-Cpp\MinGW64\bin>
Type here to search
ENG
16:06
19-10-2021