

29. Keywords are predefined, reserved words used in programming that have special meanings to the compiler. Keywords are part of the syntax and they cannot be used as an identifier. In general there are 32 keywords. The prime function of Lexical Analyser is token Generation. Among the 6 types of tokens, differentiating Keyword and Identifier is a challenging issue. Thus write a LEX program to separate keywords and identifiers.

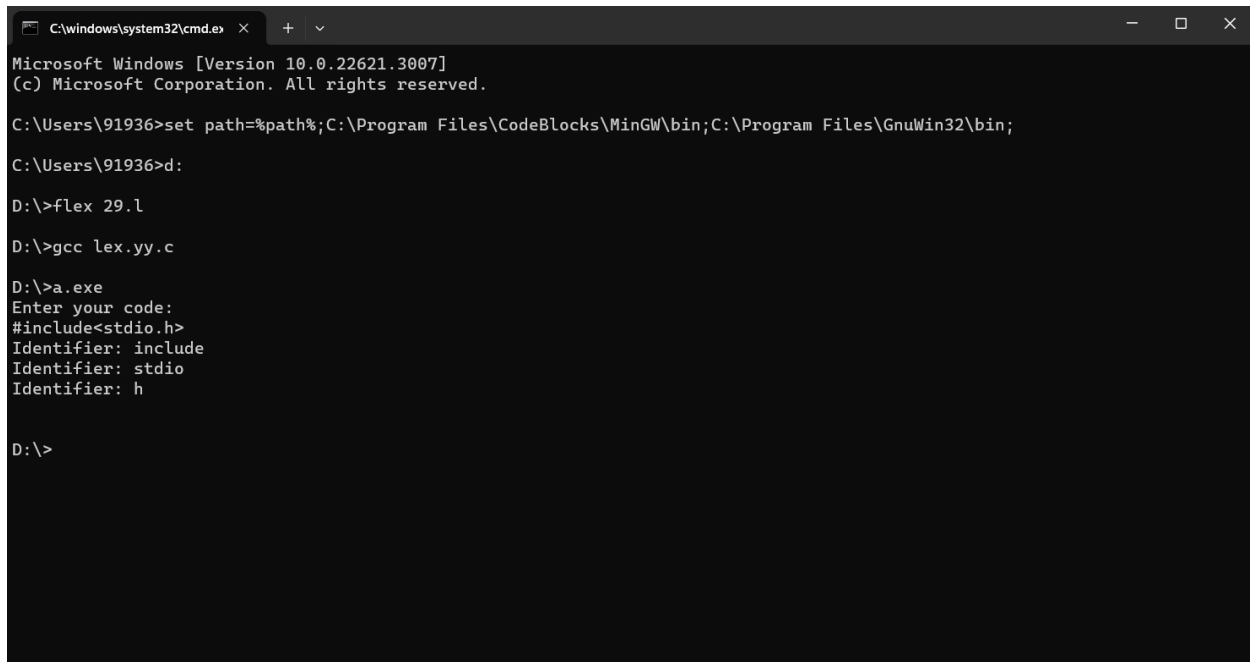
```
%{  
#include <stdio.h>  
%}  
  
%%  
  
int|float|char|void  { printf("Keyword: %s\n", yytext); }  
[a-zA-Z_][a-zA-Z0-9_]* { printf("Identifier: %s\n", yytext); }  
.  
    ; /* Ignore any other characters */  
  
%%  
  
int main() {  
    char input[4096]; // Adjust the size based on your needs  
    printf("Enter your code:\n");  
  
    if (fgets(input, sizeof(input), stdin) == NULL) {  
        fprintf(stderr, "Error reading input.\n");  
        return 1;  
    }  
  
    // Set the input buffer  
    yy_scan_string(input);  
  
    // Start parsing
```

```
yylex();
```

```
return 0;
```

```
}
```

```
int yywrap() { return 1; }
```



```
C:\windows\system32\cmd.exe
Microsoft Windows [Version 10.0.22621.3007]
(c) Microsoft Corporation. All rights reserved.

C:\Users\91936>set path=%path%;C:\Program Files\CodeBlocks\MinGW\bin;C:\Program Files\GnuWin32\bin;
C:\Users\91936>d:
D:\>flex 29.1
D:\>gcc lex.yy.c
D:\>a.exe
Enter your code:
#include<stdio.h>
Identifier: include
Identifier: stdio
Identifier: h

D:\>
```