

2CS701 Compiler Construction

Lab-1 Task

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Aim: To implement lexical analyzer to recognize all distinct token classes

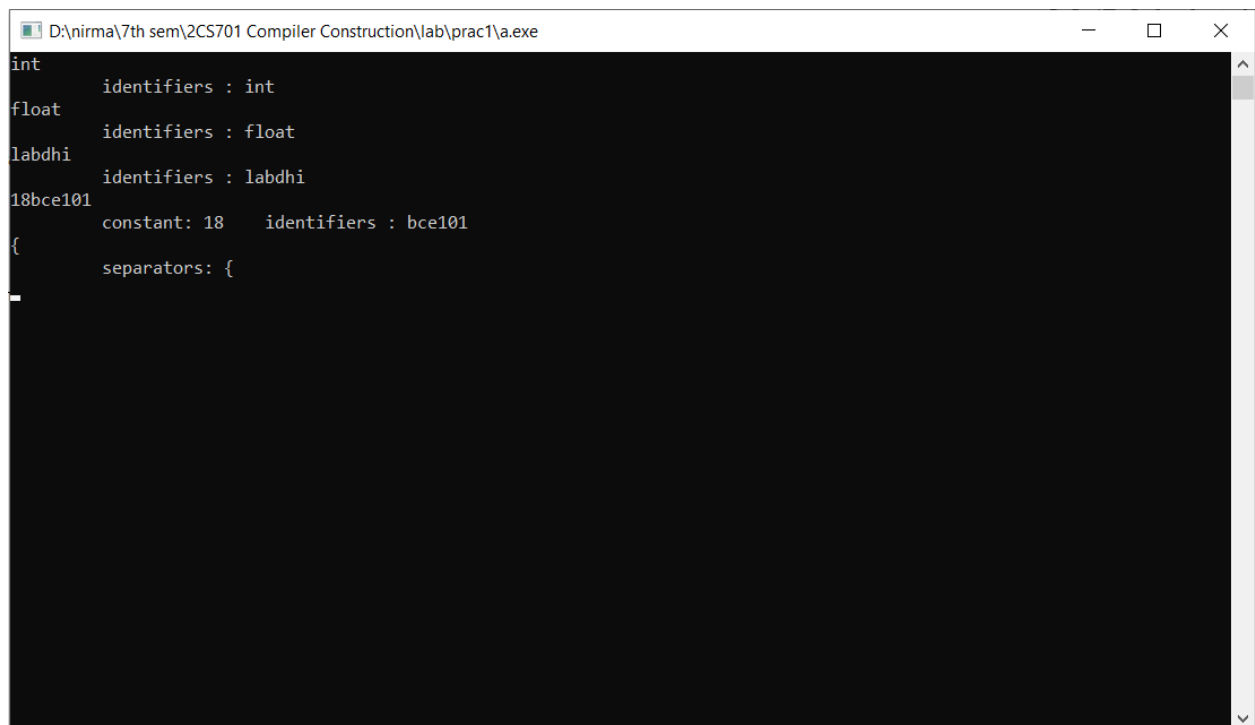
Code:

```
%{
    #include<stdio.h>
    int i=0;
}%

%%
{
    "while"|"if"|"else"|"int"|"float"           {i++;printf("\t
keywords : %s", yytext);}
    [a-zA-Z_][a-zA-Z0-9_]*                       {i++;printf("\t
identifiers : %s", yytext);}
    "{"|"("|")"|"}"|"|"                         {i++;printf("\t
separators: %s", yytext);}
    [+*/>=<==&^]                                {i++;printf("\t
operators: %s", yytext);}
    [0-9]+                                         {i++;printf("\t
constant: %s", yytext);}
    . ;
}
```

```
%%  
int yywrap()  
{  
    return 1;  
}  
int main()  
{  
    yylex();  
    printf("\n total no. of token = %d\n", i);  
}
```

Output:



```
D:\nirma\7th sem\2CS701 Compiler Construction\lab\prac1\a.exe  
int          identifiers : int  
float        identifiers : float  
labdhi       identifiers : labdhi  
18bce101     constant: 18   identifiers : bce101  
{  
    separators: {  
-
```