

## **OBJECTIVE-4**

**AIM:-Write a flex program to:-**

**a.)find vowels and consonants in a given string.**

```
%{  
  
int vowel_cnt=0,consonant_cnt=0;  
  
%}  
  
vowel [a|e|i|o|u]+  
  
consonant [^a|^e|^i|^o|^u]  
  
eol \n  
  
%%  
  
{eol} return 0;  
  
[t]+ ;  
  
{vowel} {vowel_cnt++;}  
  
{consonant} {consonant_cnt++;}  
  
%%  
  
int main()  
  
{  
  
printf("\n Enter some input string:\n");  
  
yylex();  
  
printf("Vowels=%d and consonant=%d\n",vowel_cnt,consonant_cnt);  
  
return 0;  
  
}  
  
int yywrap()
```

```
{  
return 1;  
}
```

## OUTPUT-

```
C:\Users\hp>cd Onedrive  
C:\Users\hp\OneDrive>cd Desktop  
C:\Users\hp\OneDrive\Desktop>cd Flex Programs  
C:\Users\hp\OneDrive\Desktop\Flex Programs>flex vowel.l  
C:\Users\hp\OneDrive\Desktop\Flex Programs>gcc lex.yy.c  
C:\Users\hp\OneDrive\Desktop\Flex Programs>a.exe  
  
Enter some input string:  
akshita  
Vowels=3 and consonant=4  
  
C:\Users\hp\OneDrive\Desktop\Flex Programs>a.exe  
  
Enter some input string:  
currently I am pursuing B.Tech in Mody University of Science and Technology  
Vowels=18 and consonant=55  
  
C:\Users\hp\OneDrive\Desktop\Flex Programs>
```

## **b.)Convert Uppercase letter to Lowercase and vice versa**

```
%{  
#include<stdio.h>  
%}  
%%  
  
[a-z] { printf("%c",yytext[0]-32);}   
[A-Z] {printf("%c",yytext[0]+32);}   
[t\n] ECHO;
```

```
. ECHO;

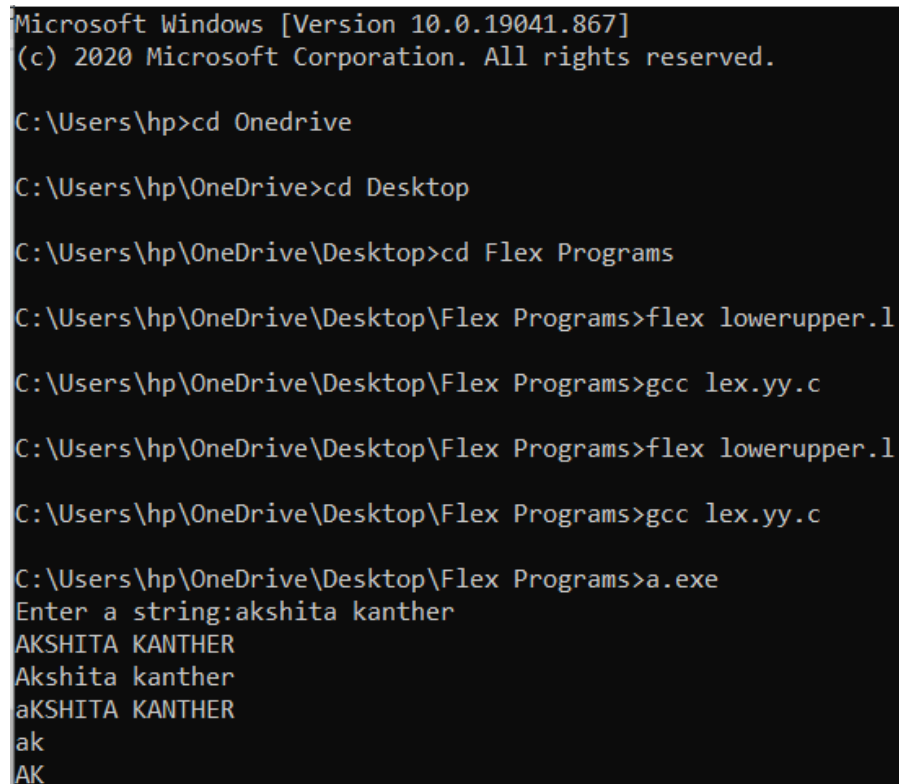
%%

int main( )
{
    printf("Enter a string:");

    yylex();
}

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

## **OUTPUT-**



```
Microsoft Windows [Version 10.0.19041.867]
(c) 2020 Microsoft Corporation. All rights reserved.

C:\Users\hp>cd Onedrive

C:\Users\hp\OneDrive>cd Desktop

C:\Users\hp\OneDrive\Desktop>cd Flex Programs

C:\Users\hp\OneDrive\Desktop\Flex Programs>flex lowerupper.l

C:\Users\hp\OneDrive\Desktop\Flex Programs>gcc lex.yy.c

C:\Users\hp\OneDrive\Desktop\Flex Programs>flex lowerupper.l

C:\Users\hp\OneDrive\Desktop\Flex Programs>gcc lex.yy.c

C:\Users\hp\OneDrive\Desktop\Flex Programs>a.exe
Enter a string:akshita kanther
AKSHITA KANTHER
Akshita kanther
aKSHITA KANTHER
ak
AK
```