

Lab – 4

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1) Write a lex program to input a sentence and count the number of vowels and consonants

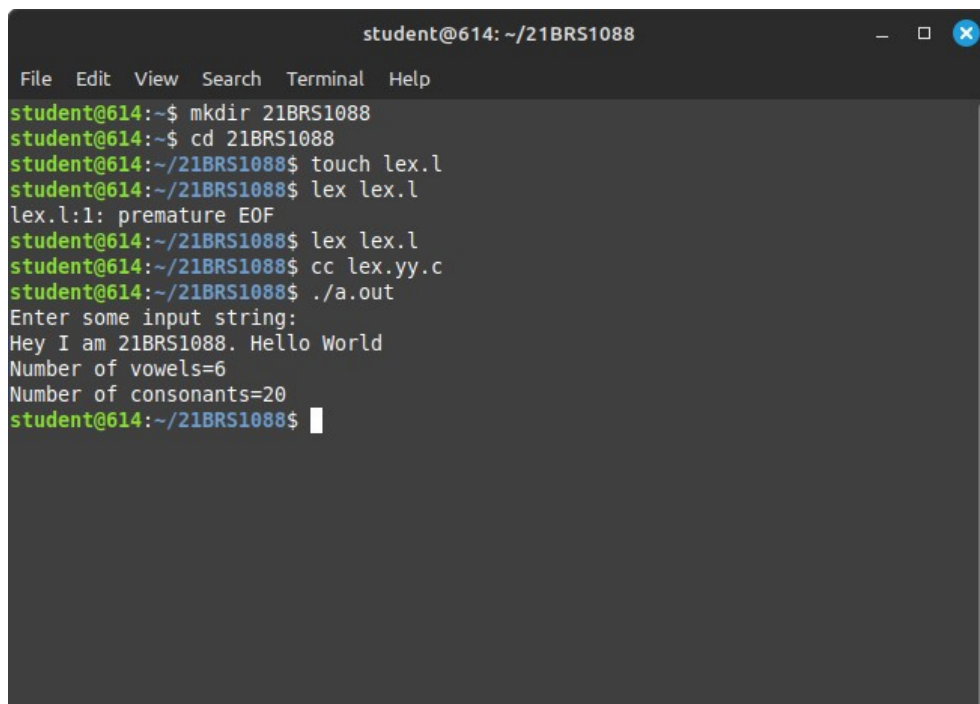
Code-

```
%{
    #include<stdio.h>
    int vow=0, con=0;
}%

%%
[ \t\n]+ ;
[aeiouAEIOU]+ {vow++;}
[^aeiouAEIOU] {con++;}
%%

int main( )
{
    printf("Enter some input string:\n");
    yylex();
    printf("Number of vowels=%d\n",vow);
    printf("Number of consonants=%d\n",con);
}

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



```
student@614: ~/21BRS1088
File Edit View Search Terminal Help
student@614:~$ mkdir 21BRS1088
student@614:~$ cd 21BRS1088
student@614:~/21BRS1088$ touch lex.l
student@614:~/21BRS1088$ lex lex.l
lex.l:1: premature EOF
student@614:~/21BRS1088$ lex lex.l
student@614:~/21BRS1088$ cc lex.yy.c
student@614:~/21BRS1088$ ./a.out
Enter some input string:
Hey I am 21BRS1088. Hello World
Number of vowels=6
Number of consonants=20
student@614:~/21BRS1088$
```

- 2) Write a lex program to input a sentence and count
- a) No of characters
 - b) No of words
 - c) No of spaces

Code

```
%{
#include <stdio.h>
int words=0,spaces=0,cc=0;

}%

%%
[ \t] {spaces++;cc+=yyleng;}
[^\t\n ]+ {words++;cc+=yyleng;}

%%

int main(int argc, char* argv[])
{
    printf("Enter some input string:\n");
    yylex();
    printf("Number of words=%d\n",words);
    printf("Number of spaces=%d\n",spaces);
    printf("Number of characters=%d\n",cc);
}

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

