

numvowelsconsonants.l

```
1  %{
2      #include <stdio.h>
3      int v = 0;
4      int c = 0;
5  %}
6
7  %%
8  [ \t\n]      ;
9  [aeiouAEIOU] { v++; }
10 [a-zA-Z]     { c++; }
11 .            ;
12 %%
13
14 int yywrap() {
15     return 1;
16 }
17 int main() {
18     printf("Enter the string: ");
19     yylex();
20     printf("No of vowels = %d\n", v);
21     printf("No of consonants = %d\n", c);
22     return 0;
23 }
24
25
26 /*
27 ALGORITHM
28 1. Start
29 2. Initialize counter vowels 'v' and consonants 'c' and set them to 0
30 3. Define Lexical Rules:
31     3.1 [ \t\n]: Matches spaces, tabs and newline characters, ignore and do nothing
32     3.2 [aeiouAEIOU]: Matches any vowels, increment vowel count by 1
33     3.3 [a-zA-Z]: Matches any alphabetic character, increment consonant count by 1
34 4. main() function:
35     4.1 Get user input
36     4.2 Invokes yylex() to perform lexical analysis
37     4.3 Prints the output
38 5. yywrap() function:
39     5.1 Called when input exhausted
40     5.2 Return 1 to show EOF
41 6. Stop
42 */
```