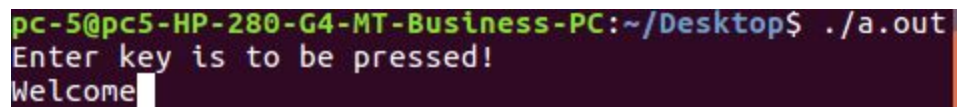## Code 1:

```
%option noyywrap
%{
    #include<stdio.h>
%}

%%
\n { printf("Welcome");}
%%

int main(){
    printf("Enter key is to be pressed!");
    yylex();
    return 0;
}
```

Output:

```
pc-5@pc5-HP-280-G4-MT-Business-PC:~/Desktop$ ./a.out
Enter key is to be pressed!
Welcome
```
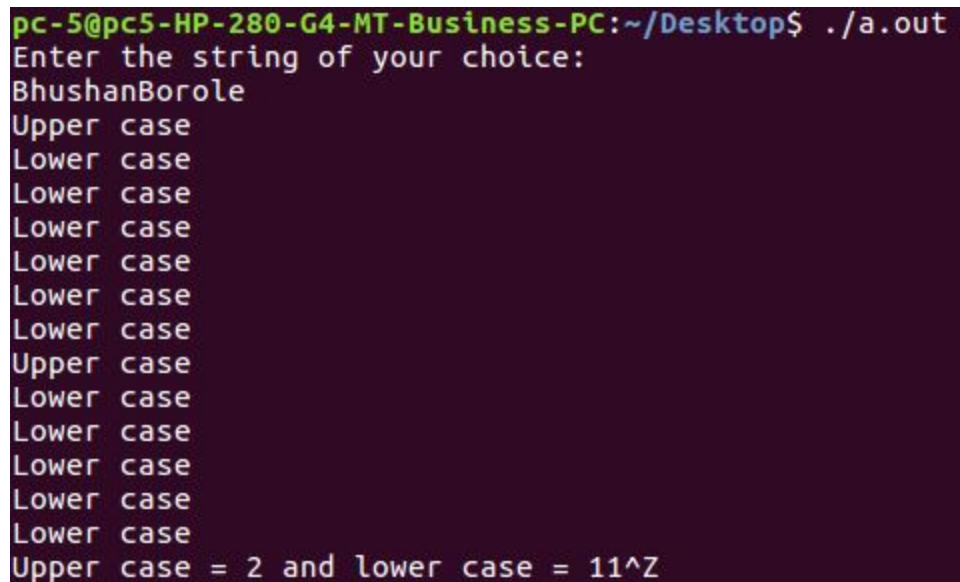
Code 2:

```
%option noyywrap
%{
    #include<stdio.h>
    int lower = 0;
    int upper = 0;
%}

%%
[A-Z] {printf("Upper case\t\n"); upper++;}
[a-z] {printf("Lower case\t\n"); lower++;}
\n {printf("Upper case = %d and lower case = %d", upper, lower);}
%%

int main(){
    printf("Enter the string of your choice: \n");
    yylex();
    return 0;
}
```

Output:

```
pc-5@pc5-HP-280-G4-MT-Business-PC:~/Desktop$ ./a.out
Enter the string of your choice:
BhushanBorole
Upper case
Lower case
Lower case
Lower case
Lower case
Lower case
Lower case
Upper case
Lower case
Lower case
Lower case
Lower case
Lower case
Upper case = 2 and lower case = 11^Z
```
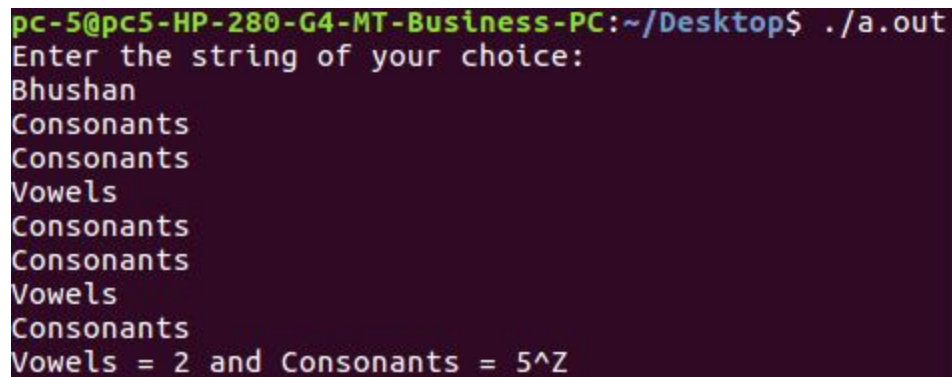
Code 3:

```
%option noyywrap
%{
   #include<stdio.h>
   int vowel = 0;
   int consonants = 0;
%}


%%
[aeiouAEIOU] {printf("Vowels\t\n"); vowel++;}
[^aeiouAEIOU\n] {printf("Consonants\t\n"); consonants++;}
\n { printf("Vowels = %d and Consonants = %d",vowel,consonants);}
%%

int main(){
   printf("Enter the string of your choice: \n");
   yylex();
   return 0;
}
```

Output:

```
pc-5@pc5-HP-280-G4-MT-Business-PC:~/Desktop$ ./a.out
Enter the string of your choice:
Bhushan
Consonants
Consonants
Vowels
Consonants
Consonants
Vowels
Consonants
Vowels = 2 and Consonants = 5^Z
```