23. Implement a LEX program to check whether the mobile number is valid or not.

%{

#include <stdio.h>

%}

%%

[0-9]{10} { printf("Valid mobile number: %s\n", yytext); }

.|\n { printf("Invalid mobile number: %s\n", yytext); }

%%

int main() {

yylex(); // Start the lexical analysis

return 0;

}  
24. Write a LEX program to count the number of vowels in the given sentence.

%{

#include <stdio.h>

int vowel\_count = 0; // Counter for vowels

%}

%%

[aeiouAEIOU] { vowel\_count++; }

.|\n { /\* Ignore non-vowel characters \*/ }

%%

int main() {

yylex(); // Start the lexical analysis

printf("Number of vowels: %d\n", vowel\_count);

return 0;

}  
25. Write a LEX program to check whether the given input is digit or not.

%{

#include <stdio.h>

%}

%%

[0-9] { printf("The input is a digit: %s\n", yytext); }

.|\n { printf("The input is not a digit: %s\n", yytext); }

%%

int main() {

yylex(); // Start the lexical analysis

return 0;

}