

Practical No. 12

* Title: LEX program to check a valid email address.

* Objective: Students will learn and implement

i) Implementation of a scanner for email checking.

ii) Rules section for such a scanner.

* Description:

i) Create a LEX file first.

ii) In the rules section, write rules for the identification email addresses like with domains like .in & .com.

iii) Then, create a YACC file.

iv) Lastly, call main routine for checking the email address as per requirement through the flag as accepted or not accepted. Finally invoke the scanner through yylex().

Code for LEX:

```
%{
#include <stdio.h>

void yyerror(const char *s);
%}

%%

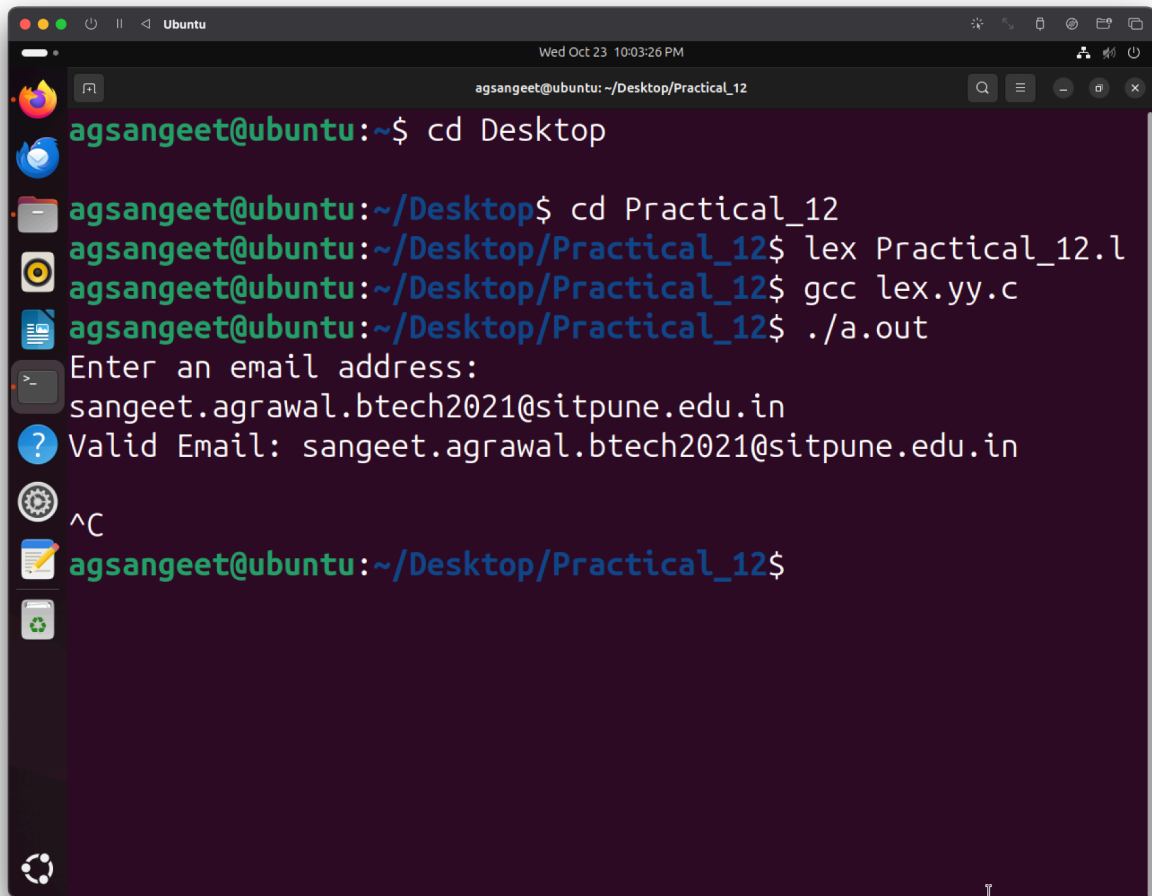
^[a-zA-Z0-9._%+-]+@[a-zA-Z0-9.-]+\.[a-zA-Z]{2,}$ { printf("Valid Email:
%s\n", yytext); }
. { printf("Invalid
Email: %s\n", yytext); }

%%

int main() {
    printf("Enter an email address:\n");
    yylex();
    return 0;
}

int yywrap(){
return 1;
}

void yyerror(const char *s) {
    printf("Error: %s\n", s);
}
```

Output:

```
agsangeet@ubuntu:~$ cd Desktop
agsangeet@ubuntu:~/Desktop$ cd Practical_12
agsangeet@ubuntu:~/Desktop/Practical_12$ lex Practical_12.l
agsangeet@ubuntu:~/Desktop/Practical_12$ gcc lex.yy.c
agsangeet@ubuntu:~/Desktop/Practical_12$ ./a.out
Enter an email address:
sangeet.agrawal.btech2021@sitpune.edu.in
Valid Email: sangeet.agrawal.btech2021@sitpune.edu.in
^C
agsangeet@ubuntu:~/Desktop/Practical_12$
```

* Conclusion: Thus, we have successfully implemented the email checker through the LEX.