**/\* Lex Program to check whether a number is Prime or Not \*/**

**Cd Documents**

**Lex prog4.l**

**Cc lex.yy.c - lfl**

**./a.out**

**%{**

**/\* Definition section \*/**

**#include<stdio.h>**

**#include<stdlib.h>**

**int flag,c,j;**

**%}**

**/\* Rule Section \*/**

**%%**

**[0-9]+ {c=atoi(yytext);**

**if(c==2)**

**{**

**printf("\n Prime number");**

**}**

**else if(c==0 || c==1)**

**{**

**printf("\n Not a Prime number");**

**}**

**else**

**{**

**for(j=2;j<c;j++)**

**{**

**if(c%j==0)**

**flag=1;**

**}**

**if(flag==1)**

**printf("\n Not a prime number");**

**else if(flag==0)**

**printf("\n Prime number");**

**}**

**}**

**%%**

**// driver code**

**int main()**

**{**

**yylex();**

**return 0;**

**}**

**/\* Lex program to check whether**

**- given string is Palindrome or Not \*/**

**Cd Documents**

**Lex prog3.l**

**Cc lex.yy.c - lfl**

**./a.out**

%

{

**int** i, j, flag;

%

}

/\* Rule Section \*/

% %

[a - z A - z 0 - 9]\*

{

**for** (i = 0, j = yyleng - 1; i <= j; i++, j--) {

**if** (yytext[i] == yytext[j]) {

flag = 1;

}

**else** {

flag = 0;

**break**;

}

}

**if** (flag == 1)

**printf**("Given string is Palindrome");

**else**

**printf**("Given string is not Palindrome");

}

% %

// driver code

**int** main()

{

**printf**("Enter a string :");

yylex();

**return** 0;

}

**int** yywrap()

{

**return** 1;

}

**/\* Lex program to check whether input is digit or not. \*/**

**Lex digit.l**

**Cc lex.yy.c - lfl**

**./a.out**

**%{**

**#include<stdio.h>**

**#include<stdlib.h>**

**%}**

**/\* Rule Section \*/**

**%%**

**^[0-9]\* printf("digit");**

**^[^0-9]|[0-9]\*[a-zA-Z] printf("not a digit");**

**. ;**

**%%**

**int main()**

**{**

**// The function that starts the analysis**

**yylex();**

**return 0;**

**}**

**/\*Lex program to check whether an year is a leap year or not\*/**

**Cd Documents**

**Lex progo.l**

**Cc lex.yy.c - lfl**

**./a.out**

%{

**void** check(**char** \*);

%}

/\*Rule Section\*/

%%

[0-9] ;

[0-9][0-9] ;

[0-9][0-9][0-9] ;

[0-9][0-9][0-9][0-9] { **printf**("%s", yytext);check(yytext); }

[0-9][0-9][0-9][0-9][0-9]+ ;

%%

// driver program

**int** main()

{

**extern** **FILE** \*yyin;

yyin=**fopen**("num", "r");

// The function that starts the analysis

yylex();

**return** 0;

}

**void** check(**char** \*a)

{

**int** x=0, i;

**for**(i=0;i<4;i++)

x=x\*10+(a[i]-'0');

**if**(x%400==0)

**printf**("\tleap year\n");

**else** **if**(x%4==0&&x%100!=0)

**printf**("\tleap year\n");

**else**

**printf**("\tnot a leap year\n");

}