**AIM:** Write a Lex program to validate arithmetic expressions and display a separate list of the

identifiers and operators.

CODE:

%{

#include<stdio.h>

#include<string.h>

int flag=0,i=0,j,k=0;

char operand[20][20],oparator[20][20];

%}

%%

[a-zA-Z0-9]+ {flag++; strcpy(operand[i],yytext); i++;}

[-+\*/] {flag--; strcpy(oparator[k],yytext); k++;}

%%

int main(int argc, char\* argv[])

{

printf("enter an arithmetic expression\n");

yylex();

if(flag!=1)

printf("Invalid expression\n");

else

{

printf("Valid expression\n");

printf("The operands are\t");

for(j=0;j<i;j++)

printf("%s\t",operand[j]);

printf("\nThe operators are\t");

for(j=0;j<k;j++)

printf("%s\t",oparator[j]);

printf("\n");

}

}

int yywrap( )

{

return 1;

}

**OUTPUT:**



