[2CEIT701: COMPILER DESIGN]

AIM - Write a Lex program to validate arithmetic expressions and display a separate list of the identifiers and operators.

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Practical-4

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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