Experiment-1

#include<stdio.h>

#include<ctype.h>

#include<string.h>

Int main()

{

Int I,ic=0,m,cc=0,oc=0,j;

Char b[30],operators[30],identifiers[30],constants[30];

Printf(“enter the string : “);

Scanf(“%[^\n]s”,&b);

For(i=0;i<strlen(b);i++)

{

If(isspace(b[i]))

{

Continue;

}

Else if(isalpha(b[i])){

Identifiers[ic] =b[i];

Ic++;

}

Else if(isdigit(b[i]))

{

M=(b[i]-‘0’);

I=i+1;

While(isdigit(b[i]))

{

M=m\*10 + (b[i]-‘0’);

I++;

}

I=i-1;

Constants[cc]=m;

Cc++;

}

Else{

If(b[i]==’\*’)

{

Operators[oc]=’\*’;

Oc++;

}

Else if(b[i]==’-‘)

{

Operators[oc]=’-‘;

Oc++;

}

Else if(b[i]==’+’)

{

Operators[oc]=’+’;

Oc++;

}

Else if(b[i]==’=’)

{

Operators[oc]=’=’;

Oc++;

}

}

}

Printf(“ identifiers : “);

For(j=0;j<ic;j++){

Printf(“%c “,identifiers[j]);

}

Printf(“\n constants : “);

For(j=0;j<cc;j++){

Printf(“%d “,constants[j]);

}

Printf(“\n operators : “);

For(j=0;j<oc;j++){

Printf(“%c “,operators[j]);

}

}