EX NO 4 :

Write a C program to implement a symbol table.

PROGRAM :

#include<stdio.h>

#include<ctype.h>

#include<stdlib.h>

#include<string.h>

#include<math.h>

void main()

{

int i=0,j=0,x=0,n;

void \*p,\*add[5];

char ch,srch,b[15],d[15],c;

printf("Expression terminated by $:");

while((c=getchar())!='$')

{

b[i]=c;

i++;

}

n=i-1;

printf("Given Expression:");

i=0;

while(i<=n)

{

printf("%c",b[i]);

i++;

}

printf("\n Symbol Table\n");

printf("Symbol \t addr \t type");

while(j<=n)

{

c=b[j];

if(isalpha(toascii(c)))

{

p=malloc(c);

add[x]=p;

d[x]=c;

printf("\n%c \t %d \t identifier\n",c,p);

x++;

j++;

}

else

{

ch=c;

if(ch=='+'||ch=='-'||ch=='\*'||ch=='=')

{

p=malloc(ch);

add[x]=p;

d[x]=ch;

printf("\n %c \t %d \t operator\n",ch,p);

x++;

j++;

}}}}

OUTPUT :

