**Practical – 11**

**Aim:** **Write a program to generate symbol table.**

**Code:**

#include <stdio.h>

#include <math.h>

#include <string.h>

#include <ctype.h>

#include <stdlib.h>

void main()

{

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

void \*loopup, \*address[5];

char ch, Search, Array2[15], Array3[15], c;

printf("Input the expression ending with $ sign:\n");

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

{

Array2[i] = c;

i++;

}

n = i - 1;

printf("Given Expression:");

i = 0;

while (i <= n)

{

printf("%c", Array2[i]);

i++;

}

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

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

while (j <= n)

{

c = Array2[j];

if (isalpha(toascii(c)))

{

loopup = malloc(c);

address[x] = loopup;

Array3[x] = c;

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

x++;

j++;

}

else

{

ch = c;

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

{

loopup = malloc(ch);

address[x] = loopup;

Array3[x] = ch;

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

x++;

j++;

}

}

}

}

