**PROGRAM 8:**

Implement a C program to perform symbol table operations.

CODE:-

#include <stdio.h>

#include <string.h>

#define MAX\_SYMBOLS 100

#define MAX\_NAME\_LENGTH 50

typedef struct{

char name[MAX\_NAME\_LENGTH];

int value;

}Symbol;

Symbol symbolTable[MAX\_SYMBOLS];

int symbolCount=0;

void insertSymbol(char \*name,int value){

if(symbolCount<MAX\_SYMBOLS){

strcpy(symbolTable[symbolCount].name,name);

symbolTable[symbolCount].value=value;

symbolCount++;

}

}

int searchSymbol(char \*name){

for(int i=0;i<symbolCount;i++){

if(strcmp(symbolTable[i].name,name)==0){

return i;

}

}

return -1;

}

void deleteSymbol(char \*name){

int index=searchSymbol(name);

if(index!=-1){

for(int i=index;i<symbolCount-1;i++){

symbolTable[i]=symbolTable[i+1];

}

symbolCount--;

}

}

int main(){

insertSymbol("x",10);

insertSymbol("y",20);

int idx=searchSymbol("x");

if(idx!=-1){

printf("Found symbol: %s = %d\n",symbolTable[idx].name,symbolTable[idx].value);

}else{

printf("Symbol not found.\n");

}

deleteSymbol("x");

return 0;

}

OUTPUT:-

