Implement a simple intermediate code generator in C program, which produces three address code statements for a given input expression.

PROGRAM :

#include <stdio.h>

#include <string.h>

#include <conio.h>

struct op

{

char l;

char r[20];

} op[10], pr[10];

int main()

{

int n, i, j, z = 0;

char temp;

char \*p;

printf("Enter the no of values : ");

scanf("%d", &n);

for (i = 0; i < n; i++)

{

printf("\tLeft : \t");

op[i].l = getche();

printf("\tRight : \t");

scanf("%s", op[i].r);

}

printf("Intermediate Code\n\n");

for (i = 0; i < n; i++)

{

printf("%c=", op[i].l);

printf("%ss\n", op[i].r);

}

for (i = 0; i < n; i++)

{

temp = op[i].l;

for (j = 0; j < n; j++)

{

p = strchr(op[i].r, temp);

if (p)

{

pr[z].l = op[i].l;

strcpy(pr[z].r, op[i].r);

z++;

}

}

}

}

OUTPUT :

Input: sum.txt

out = in1 + in2 + in3 - in4

Output: out.txt

t1=in1+in2

t2=t1+in3

t3=t2-in4

SSSout=t3