# Practical-9

# Write a program which generates Quadruple Table for the given postfix String.

#include<stdio.h>

#include<string.h>

#include<ctype.h>

#include<conio.h>

void main()

{

char expr[20],new\_expr[50];

char quad[50][4];

int i,j,k,quad\_i;

int temp\_var=65;

clrscr();

printf("Enter the postfix Expression");

scanf("%s",expr);

i=0;

quad\_i=0;

while(strlen(expr)!=1)

{

if(!isalpha(expr[i]))

{

quad[quad\_i][0]=expr[i];

quad[quad\_i][1]=expr[i-2];

quad[quad\_i][2]=expr[i-1];

quad[quad\_i][3]=temp\_var;

quad\_i++;

expr[i-2]=temp\_var;

j=i;

j++;

while(expr[j]!='\0')

{

expr[j-2]=expr[j];

j++;

}

expr[j-2]='\0';

temp\_var++;

i=i-2;

}

i++;

}

printf("Operator\tOp1\t Op2\t Temp\n");

for(k=0;k<quad\_i;k++)

{

printf("%c \t\t",quad[k][0]);

printf("%c \t",quad[k][1]);

printf("%c \t",quad[k][2]);

printf("%c \t",quad[k][3]);

printf("\n");

}

getch();

}

OUTPUT:

Enter the postfix Expression

ab\*c+

Operator Op1 Op2 Temp

\* a b A

+ A c B