**#include <stdio.h>**

**#include <math.h>**

**#define SIZE 30**

**int stack[SIZE];**

**int top=-1;**

**void push(int element)**

**{**

**top=top+1;**

**stack[top]=element;**

**}**

**int pop()**

**{**

**top=top-1;**

**return(stack[top+1]);**

**}**

**int compute(char op, int op1, int op2)**

**{**

**if(op=='+')**

**return(op1+op2);**

**else if(op=='-')**

**return(op1-op2);**

**else if(op=='\*')**

**return(op1\*op2);**

**else if(op=='/')**

**return(op1/op2);**

**else**

**return(pow(op1,op2));**

**}**

**int Evaluate\_Postfix(char exp[])**

**{**

**int i,index,op1,op2,res;**

**char num[]={'0','1','2','3','4','5','6','7','8','9','+','-','\*','/','^'};**

**for(i=0;i<strlen(exp);i++)**

**{**

**for(index=0;index<15;index++)**

**{**

**if(num[index]==exp[i])**

**{**

**if(index<=9)**

**push(index);**

**else**

**{**

**op2=pop();**

**op1=pop();**

**res=compute(exp[i],op1,op2);**

**push(res);**

**}**

**break;**

**}**

**}**

**}**

**return(stack[top]);**

**}**

**void main()**

**{**

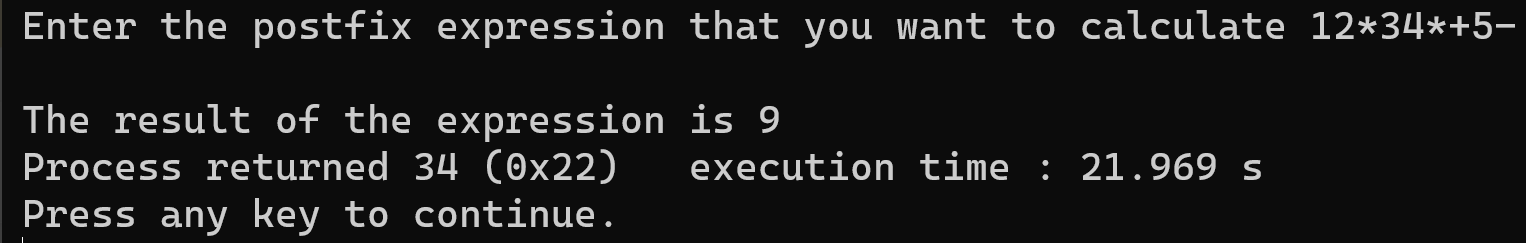
**char exp[SIZE];**

**printf("Enter the postfix expression that you want to calculate ");**

**scanf("%s",exp);**

**printf("\nThe result of the expression is %d",Evaluate\_Postfix(exp));**

**}**

****