**#include <stdio.h>**

**#include <string.h>**

**#define SIZE 30**

**char infix[SIZE];**

**char postfix[SIZE];**

**char stack[15];**

**int top=-1;**

**int toppostfix=-1;**

**int isbracket=0;**

**void push(char c)**

**{**

**if(top==SIZE-1)**

**printf("Stack overflow.");**

**else**

**{**

**top=top+1;**

**stack[top]=c;**

**}**

**}**

**char pop()**

**{**

**if(top==-1)**

**printf("Stack underflow.");**

**else**

**{**

**top=top-1;**

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

**}**

**}**

**int precedence(char c)**

**{**

**if(c=='^')**

**return(5);**

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

**return(4);**

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

**return(3);**

**else if(c=='+')**

**return(2);**

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

**return(1);**

**}**

**void main()**

**{**

**int i;**

**printf("Enter the infix expression. ");**

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

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

**{**

**if((infix[i]>=65 && infix[i]<=90))**

**{**

**toppostfix=toppostfix+1;**

**postfix[toppostfix]=infix[i];**

**}**

**else if(infix[i]=='(')**

**{**

**isbracket=1;**

**push(infix[i]);**

**}**

**else if(top!=-1)**

**{**

**if(precedence(infix[i])<precedence(stack[top]) || infix[i]==')')**

**{**

**while((isbracket==0 && top!=-1) || (isbracket==1 && stack[top]!='('))**

**{**

**toppostfix=toppostfix+1;**

**postfix[toppostfix]=pop();**

**}**

**if(infix[i]==')')**

**{**

**pop();**

**isbracket=0;**

**}**

**else**

**push(infix[i]);**

**}**

**else**

**{**

**push(infix[i]);**

**}**

**}**

**else**

**push(infix[i]);**

**}**

**while(top!=-1)**

**{**

**toppostfix=toppostfix+1;**

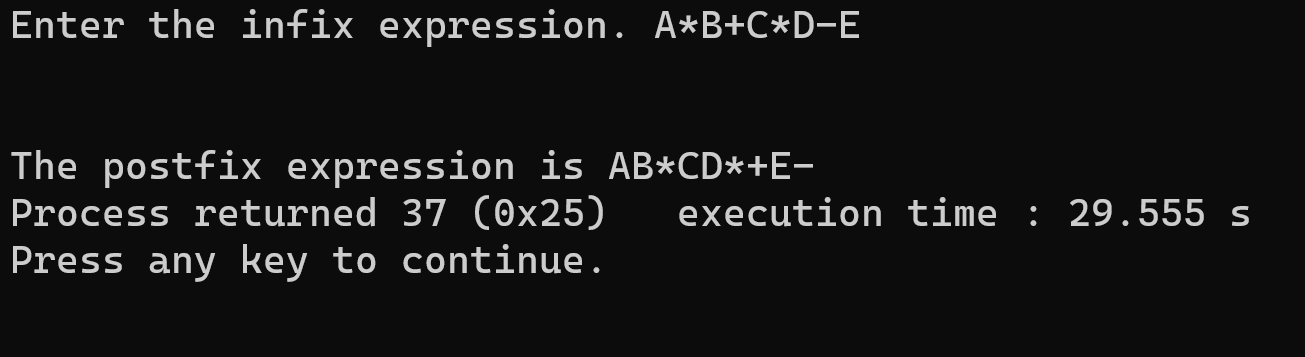
**postfix[toppostfix]=pop();**

**}**

**postfix[toppostfix+1]='\0';**

**printf("\n\nThe postfix expression is %s",postfix);**

**}**

****