

**Aim:**

Write a C program to convert a Prefix expression to Postfix expression.

**Source Code:**

prefixToPostfix.c

```
#include<stdio.h>
#include<conio.h>
#include<stdlib.h>
#include<string.h>
#define MAX 20
char str[MAX],stack[MAX];
int top=-1;
void push(char c)
{
    stack[++top] = c;
}
char pop(){
    return stack[top--];
}
void pre_post()
{
    int n,i,j=0;
    char c[20],a,b,op;
    printf("Enter a Prefix expression:");
    gets(str);
    n = strlen(str);
    for(i=0;i<MAX;i++)
        stack[i]='\0';
    printf("Postfix expression is:");
    for(i=0;i<n;i++)
    {
        if(str[i]=='+' || str[i]=='-' || str[i]=='*' || str[i]=='/')
        {
            push(str[i]);
        }
        else{
            c[j++]=str[i];
            while((top!=-1)&&(stack[top]!='\0'))
            {
                a=pop();
                c[j++]=pop();
            }
            push('\0');
        }
    }
    c[j]='\0';
    printf("%s",c);
    printf("\n");
}
void main(){
```

```
pre_post();  
}
```

### Execution Results - All test cases have succeeded!

Test Case - 1
User Output
Enter a Prefix expression: +AB
Postfix expression is:AB+

Test Case - 2
User Output
Enter a Prefix expression: +/AB/CD
Postfix expression is:AB/CD/+