Aim:

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

Source Code:

prefixToPostfix.c

```c
#include<stdio.h>
#include<conio.h>
#include<string.h>
#include<stdlib.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];
     char a,b,op;
      printf("Enter a Prefix expression:");
        scanf("%s", 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]=='@'))
                              {
                                  a=pop(); c[j++]=pop();
                              }
                               push('@');
                       }
                }
                 c[j]='\0';
                  printf("%s\n",c);
}
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/+