2022-2026-CSE-B

Aim:

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

Source Code:

prefixToPostfix.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++)</pre>
          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/+	