Date:2023-07-08

Aim:

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

Source Code:

prefixToInfix.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 prefix() {
   int n,i;
   char a,b,op;
   printf("Enter a Prefix expression:");
   //fflush(stdin);
   scanf("%s", str);
   n=strlen(str);
   for(i=0;i<MAX;i++) {</pre>
      stack[i]='\0';
   }
   printf("Infix expression:");
   for(i=0;i<n;i++) {
      if(str[i]=='+'||str[i]=='-'||str[i]=='*'||str[i]=='/') {
         push(str[i]);
      } else {
         op=pop();
         a=str[i];
         if(op == '\0') {
            printf("%c",a);
         } else {
            printf("%c%c",a,op);
      }
   }
   if(top >= 0) {
      printf("%c\n",str[top--]);
   } else {
      printf("\n");
   // printf("%c\n",str[top--]);
void main() {
```

```
prefix();
}
```

Execution Results - All test cases have succeeded!

Test Case - 1
User Output
Enter a Prefix expression: +AB
Infix expression:A+B

Test Case - 2	
User Output	
Enter a Prefix expression: +/AB/CD	
<pre>Infix expression:A/B+C/D</pre>	