

**Aim:**

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

**Source Code:**postfixToInfix.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--];
}char *strrev(char *str)
{char c, *front, *back;
if(!str || !*str)
return str;
for(front=str,back=str+strlen(str)-1;front < back;front++,back--)
{
    c=*front;*front=*back;*back=c;
}return str;
}void postfix()
{int n,i,j=0;
char a,b,op,x[20];
printf("Enter a Postfix expression:");
fflush(stdin);
scanf("%s", str);
strrev(str);
n=strlen(str);
for(i=0;i<MAX;i++)
{
    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
    {
        x[j]=str[i];j++;
        x[j]=pop(); j++;
    }
}
```

```
    }  
}  
x[j]=str[top--];  
    strrev(x);  
    printf("%s\n",x);  
}  
void main()  
{  
    postfix();  
}
```

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

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

Test Case - 2
User Output
Enter a Postfix expression: ABC*+D+
Infix expression:A+B*C+D