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2022-2026-CSE-A

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++)</pre>
   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	
Infix expression:A/B+C/D	