

Program^{for} conversion from infix to postfix.

```
#include <stdio.h>
#include <string.h>
#include <stdlib.h>
int F(char symbol)
{
    switch (symbol)
    {
        case '+':
        case '-': return 2;
        case '*':
        case '/': return 4;
        case '^':
        case '$': return 5;
        case '(': return 0;
        case '#': return -1;
        default: return 8;
    }
}
```

int G(char symbol)

{

case '+':

case '-': return 1;

case '*':

case '/': return 3;

case '^':

case '\$': return 6;

case 'c': return 9;

case ')': return 0;

default: return 7;

}

⚡

void infix-postfix(char infix[], char postfix[])

{

int i, j;

char s[20], symbol;

top = -1;

s[++top] = '#';

j = 0;

for (i = 0; i < strlen(infix); i++)

{

symbol = infix[i];

while (F(s[top]) > G(symbol))

{

postfix[j++] = s[top--];

j++;

}


```
if (F(s[top]) != G(symbol))
{
    s[++top] = symbol;
}
else
    top--;
```

```
while (s[top] != '#')
{
    postfix[j++] = s[top--];
```

```
postfix[j] = '\0';
```

```
void main()
{
```

```
    char infix[20];
```

```
    char postfix[20];
```

```
    printf("enter valid infix expression");
```

```
    scanf("%s", infix);
```

```
    infix-postfix(infix, postfix);
```

```
    printf("the postfix expression is");
```

```
    printf("%s\n", postfix);
```

```
    getch();
```

```
}
```