

2. #include <stdio.h>  
#include <string.h>  
#include <conio.h>  
int F (char symbol)

{

switch (symbol)

{

case '+':

case '-': return 2;

case '\*':

case '/': return 4;

case '\$': return 5;

case '(': return 0;

case '#': return -1;

default: return 8;

}

}

int ~~char~~ G (char symbol)

{

switch (symbol)

{

```

    case '+':
    case '-': return 1;
    case '*':
    case '/': return 3;
    case '$': return 6;
    case '(': return 9;
    case ')': return 0;
    default: return 7;
}

```

3.

```

void infix_postfix(char infix[], char postfix[])
{

```

```

    int top, i, j;
    char s[30], 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];

clrscr;

printf("Enter the valid <sup>infix</sup> postfix expression: ");

scanf("%s", infix);

infix\_postfix(infix, postfix);

printf("The postfix exp is ");

printf("%s", postfix);

getch();

}