```c
#include <stdio.h>
#include <string.h>
int F(char symbol)
{
    switch(symbol)
    {
        case '+':
        case '-':return 2;
        case '*':
        case  '/':return 4;
        case '^':
        case '$':return 5;
        case '(': return 0;
        case '#': return -1;
        default : return 8;
    }
}
int G(char symbol)
{
    switch(symbol)
    {
        case '+':
        case '-':return 1;
        case '*':
        case  '/':return 3;
        case '^':
        case '$': return 6;
        case '(': return 9;
        case ')': return 0;
        default : return 7;
    }
}
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--];
```

```c
            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 equation\n");
    scanf("%s",infix);
    infix_postfix(infix,postfix);
    printf("postfix equation is \n");
    printf("%s\n",postfix);
}
```

```
Enter valid infix equation
((a+b)*c-(d-e))^(f+g)
postfix equation is
ab+c*de--fg+^



...Program finished with exit code 0
Press ENTER to exit console.
```