```
#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 {
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[i] = \0;
}

void main()
{
char infix [20];
char postfix[20];
    //
printf("Enter a valid infix expression:-\n");
scanf("%s", infix);
infix_postfix(infix, postfix);
printf(" The postfix expression is:-\n");
printf("%s", postfix);
```