lab program 2

```
# 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, j, i;
 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[tob--];
 j++;
}
if (F(s[top]) != G(symbol))
s[++top] = symbol;
else
top--;
}
while (s[top]! = '#')
{
 postfix [j++] = s[top--];
}
 postfix [j] = '\0';
}
Voidmain()
{
 char infix[20];
 char postfix[20];
 printf("\Enter the Valid infix expression\n");
infix -postfix(infix, postfix);
printf(" the postfix expression is\n");
printf ("%s\n", postfix);
}
```