30/09

```
#include <stdio.h>
#include <string.h>
#include <process.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--];
      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 the valid infix expression\n");
  scanf("%s", infix);
 infix_postfix (infix, postfix);
 printf("the postfix exp is \n");
  printf("%s\n", postfix);
   getch();
  }
```