```c
#include<stdio.h>
#include<conio.h>
#include<string.h>
int index=0,pos=0,top=-1,length;
char symbol,temp,infix[20],postfix[20],stack[20];
void infix_postfix();
void push(char symbol);
char pop();
int pred (char symbol);
void main(){
printf("Enter the infix expression\n");
scanf("%s",infix);
infix_postfix();
printf("Infix Expression = %s\n",infix);
printf("Postfix Expression = %s\n",postfix);
}
void infix_postfix(){
length=strlen(infix);
push('#');
while(index<length){
symbol=infix[index];
switch(symbol){
case '(': push(symbol);
        break;
case ')': temp=pop();
        while(temp!='('){
                postfix[pos]=temp;
                pos++;
                temp=pop();
        }
        break;
case '+':
case '-':
case '*':
case '/':
case '^': while(pred(stack[top])>=pred(symbol)){
        temp=pop();
        postfix[pos++]=temp;
        }
        push(symbol);
        break;
default:postfix[pos++]= symbol;
}
index++;
}
while(top>0){
    temp=pop();
    postfix[pos++]=temp;
}
}
void push(char symbol){
top=top+1;
stack[top]=symbol;
}
char pop(){
char symb;
symb=stack[top];
top=top-1;
return(symb);
}
int pred(char symbol){
int p;
switch(symbol){
case '^': p=3;
        break;
case '*':
```

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67   case '/': p=2;
68          break;
69   case '+':
70   case '-':p=1;
71          break;
72   case '(': p=0;
73          break;
74   case '#': p=-1;
75          break;
76   }
77   return (p);
78   }
79
80
```