4]

#include<stdio.h>

#include<ctype.h>

#define MAX 100

char stack[MAX];

int top=-1;

void push(char ch){

stack[++top]=ch;

}

char pop(){

return stack[top--];

}

char peek(){

return stack[top];

}

int isEmpty(){

return top == -1;

}

int precedence(char op){

if(op == '^') return 3;

if(op == '\*' || op == '/') return 2;

if(op == '+' || op == '-') return 1;

return 0;

}

void infixToPostfix(char infix[], char postfix[]){

int i,k=0;

char ch;

for(i=0;infix[i]!='\0';i++){

ch=infix[i];

if(isalnum(ch)){

postfix[k++]=ch;

}

else if(ch == '('){

push(ch);

}

else if(ch == ')'){

while(!isEmpty() && peek() != '('){

postfix[k++] = pop();

}

pop();

}

else{

while(!isEmpty() && precedence(peek()) >= precedence(ch)){

postfix[k++] = pop();

}

push(ch);

}

}

while(!isEmpty()){

postfix[k++]=pop();

}

postfix[k] = '\0';

}

int main(){

char infix[MAX], postfix[MAX];

printf("Enter infix expression: ");

scanf("%s",infix);

infixToPostfix(infix,postfix);

printf("Postfix expression: %s\n",postfix);

return 0;

}

