5]

#include<stdio.h>

#include<ctype.h>

#define MAX 100

int stack[MAX];

int top=-1;

void push(int val){

stack[++top]=val;

}

int pop(){

return stack[top--];

}

int evaluatePostfix(char postfix[]){

int i,op1,op2;

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

char ch=postfix[i];

if(isdigit(ch)){

push(ch-'0');

}

else{

op2=pop();

op1=pop();

switch(ch){

case '+': push(op1 + op2); break;

case '-': push(op1 - op2); break;

case '\*': push(op1 \* op2); break;

case '/': push(op1 / op2); break;

case '^': {

int result=1;

for(int j=0;j<op2;j++) result \*= op1;

push(result);

break;

}

case '=':

push(op1 == op2);

break;

}

}

}

return pop();

}

int main(){

char postfix[MAX];

printf("Enter postfix expression (single-digit operands): ");

scanf("%s",postfix);

int result=evaluatePostfix(postfix);

printf("Result = %d\n",result);

return 0;}

