#include <iostream>

#include <stdlib.h>

#define N 50000

using namespace std;

struct Stack

{

char s[N];

int top;

};

void makenull(Stack &S)

{

S.top = -1;

}

void push(Stack &S, char x)

{

if(S.top == N)

cout << "满" << endl;

else

S.s[++S.top] = x;

}

char pop(Stack &S)

{

if(S.top == -1)

{

cout << "不匹配" << endl;

exit(1);

}

else

return S.s[S.top--];

}

void correct(char \*ch, int m)

{

Stack r;

char tep;

int flag = 0;

makenull(r);

int j = 0;

while(j < m)

{

if(ch[j] == '(' || ch[j] == '[' || ch[j] == '{')

{

push(r, ch[j]);

}

if(ch[j] == ')' || ch[j] == ']' || ch[j] == '}')

{

tep = pop(r);

if(tep != ch[j])

{

cout << "不匹配" << endl;

flag = 1;

break;

}

}

j++;

}

if(!flag)

{

cout << "表达式正确！" << endl;

}

}

int main()

{

char ch[N-1];

int m;

cout << "请输入表达式" << endl;

cin >> ch;

cout << "输入表达式的长度" << endl;

cin >> m;

correct(ch, m);

return 0;

}