#include <iostream>

#include <string.h>

using namespace std;

typedef struct Node {

char Data;

Node\* next;

};

typedef Node\* stack;

void makenull\_stack(stack &s) {

s=new (Node);

s->next=NULL;

}

void gettop\_stack(stack &s) {

char data=s->Data;

cout<<data<<endl;

}

void push\_stack(stack &s, char x) {

Node\* t;

t=new (Node);

t->Data=x;

t->next=s;

s=t;

}

void deletetop\_stack(stack &s, int &flag) {

Node\* P;

P=new (Node);

if (s->next == NULL) {

flag=0;

}

else {

P=s->next;

s->next=P->next;

s=P;

}

}

int main() {

stack s;

int x, flag;

char flagg;

char r[1000];

cout<<"Nhap vao day ngoac: ";

cin.getline(r,1000);

cout<<endl;

makenull\_stack(s);

for (int i=0;i<strlen(r);++i) {

if ( r[i]=='(' ) {

push\_stack(s, r[i]);

}

else {

if ( r[i]==')' ) {

deletetop\_stack(s, flag);

}

}

}

if (s->next==NULL && flag != 0) {

cout<<"Day dung!";

cout<<endl<<endl;

}

else {

cout<<"Day sai!";

cout<<endl;

}

return 0;

}