

Csu_2011_JulyContest problems by Gestapolur

Probs

C A simple maze 256MB Memory , 1s

problem description

Now you are in a simple maze .The maze will be describe as a 0/1 matrix. 0 is road and 1 instead of wall . You stand at start position (Sr,Sc) first .You could move to north\south\west\east at one step. Your task is to find the shortest path to exit in end position(Er,Ec).

If you start in the wall or no path from start position to end position , just print "No Path."(No quotation marks)

input format

The first line :a integer T($1 \leq T \leq 10$) , the total test cases .

In each test cases :

First line : Two integers N and M ($1 \leq N, M \leq 50$), the row and column that the maze has.

The second line : Four integers ($1 \leq Sr, Er \leq N, 1 \leq Sc, Ec \leq M$),instead Sr,Sc,Er,Ec.

Next N lines : The maze as the description above.

output format

For each test case , out put a integer which is the minimum steps from start position to end position.

sample input

```
1
5 10
1 2 5 9
1011111111
1011111011
1000000011
1011111011
1111111001
```

sample output

```
11
```

hint

The sample test case move as follow:

```
1 0 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 0 1 1
1 2 3 4 5 6 7 8 1 1
1 0 1 1 1 1 1 9 1 1
1 1 1 1 1 1 110 11 1
```

G A simple Add 64MB Memory , 1s

problem description

Give two integers A and B , calculate their sum.

input format

First Line : A integer T , the total testcases.

2.. $2 \times k$.. $2 \times T$ line : A integer A(no more than 1000 digits) in the description above.

3.. $2 \times k + 1$.. $2 \times T + 1$ lines : A integer B(no more than 1000 digits) , as the description above.

output format

For each test case , output the sum of A and B inputted.

sample input

2
1
2
-1
2

sample output

3
1

M 简单添加 16MB Memory , 1s

problem description

在长度为 $N(1 \leq N \leq 20)$ 的一串数字添加 $K(0 \leq K < N)$ 个加号, 使得最后的和最大。

input format

第一行: 一个整数 T , 表示测试数据的组数。

2.. $2*k..2*T$ 行: 两个整数 n, k , 同题目描述。

3.. $2*k+1..2*T+1$ 行: 一个长度为 n 的数字串。

output format

T 行, 第 i 行对应题目中的第 i 组测试数据。

sample input

2
4 2
1234
5 3
12335

sample output

37
41

hint

第一组数据的解释: $1+2+34 = 37$

第二组数据的解释: $1+2+3+35 = 41$

N 简单统计 256MB Memory , 2s

problem description

给定一个字符串 S , 其不相同的子串个数。

子串定义: 对于 $i \leq j, S[i]..S[j]$ 这一段字符顺次排列形成的字符串。

input format

第一行: 一个整数 $T(1 \leq T \leq 20)$, 表示测试数据的个数。

2.. $T+1$ 行: 每行一个字符串, 长度不超过 1000, 字符全部为小写字母。

output format

对于每个测试数据, 输出其不相同的子串个数

sample input

2
aaaaa
ababa

sample output

5

