

---

# 1. Base Tetracontakaidi

## JUDGES DATA FILE

```
29
1111
gggggg
! ?
%% % @ a
utcs!
0
10
-101
+a!
ghijkl
-1234
mike
mitra
-mitra
ut
! ? ! !
? $ % # @
a0000
g00000
!
@
#
$
%
?
-a % m
unt
-gggggg
```

## JUDGES OUTPUT

```
75895
2142061168
1549
130691074
95521812
0
42
-1765
456
2145326505
-77746
1662542
69843196
-69843196
1289
2733984
118170272
31116960
2091059712
36
38
```

---

39  
40  
41  
37  
-19384  
53915  
-2142061168

---

## 2. He Makes Them Suffer in the Mountains

### JUDGES DATA FILE

```
12
43.0 4.5 NO 3
11.7 8.5 NO 1
4.7 6.0 YES 6
1.3 6.4 NO 5
3.0 5.0 NO 4
2.9 4.9 NO 5
0.8 15.3 YES 3
18.0 6.1 YES 2
1.4 6.4 NO 1
5.0 5.6 NO 8
4.7 12.5 YES 5
7.0 3.1 NO 2
```

### JUDGES OUTPUT

```
1 1935 HC
2 995 CAT 1
3 632 CAT 1
4 133 CAT 4
5 200 CAT 3
6 192 CAT 3
7 372 CAT 2
8 1348 HC
9 90 CAT 4
10 380 CAT 2
11 888 CAT 1
12 217 CAT 3
```

---

### 3. Building Dell Hall

JUDGES DATA FILE  
NONE

JUDGES OUTPUT

1

```
-----  
| | | . | . . | . | . . | | | |  
| | | . | . . | . | . . | | | |  
| | | . | . . | . | . . | | | |
```

2

```
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| | | . | . . | . | . . | | | |  
-----  
| | | . | . . | . | . . | | | |  
| | | . | . . | . | . . | | | |  
| | | . | . . | . | . . | | | |
```

3

```
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| | | . | . . | . | . . | | | |  
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| | | . | . . | . | . . | | | |  
-----  
| | | . | . . | . | . . | | | |  
| | | . | . . | . | . . | | | |  
| | | . | . . | . | . . | | | |
```

4

```
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| | | . | . . | . | . . | | | |  
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| | | . | . . | . | . . | | | |  
-----  
| | | . | . . | . | . . | | | |  
-----  
| | | . | . . | . | . . | | | |  
| | | . | . . | . | . . | | | |  
| | | . | . . | . | . . | | | |
```

5

```
-----  
| | | . | . . | . | . . | | | |  
-----  
| | | . | . . | . | . . | | | |  
-----  
| | | . | . . | . | . . | | | |  
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| | | . | . . | . | . . | | | |  
-----  
| | | . | . . | . | . . | | | |  
| | | . | . . | . | . . | | | |  
| | | . | . . | . | . . | | | |
```

6

```
) ( ) ( ) ( -- ) ( ) ( ) (  
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| | | . | . . | . | . . | | | |
```

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|||.|||.|||.|||  
-----  
|||.|||.|||.|||  
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|||.|||.|||.|||  
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|||.|||.|||.|||  
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		.			.			.		
		.			.			.		

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## 4. Basketball Performance Grading

### JUDGES DATA FILE

```
18
12 3FG 3FG FG fg G Fg 3fg STL BLK AST FG 3FG TO to 3FG 3FG 3fg
15
37 3fg 3fg 3fg 3 3 3 3 3 BLK BLK TO TO TO TO to
171 TO TO TO to to to to to to to x x x x STL stl stl STL BLK PF PF
32 AST
12 AST FG TO REB PF FG STL BLK 3FG FT 3FG TO 3FG 3FG REB PF PF FT 3FG REB
00 STL REB TO BLK AST AST
1 BLK REB 3FG AST PF 3FG 3FG FG PF FT
87 X X X X X
17 blk blk 3 3f 3g to to To t0 3fg 3fg 3FG BLK FT FT FT AST AST AST AST FG
FG FT FT FT PF PF PF PF
42 pf pf pf pf pf pf pf pf pf pf 3fg 3fg 3fg
7 to to to to to to to to to to 3fg
19 3FG PF AST TO REB AST BLK REB 3FG FG BLK TO TO PF AST FG STL AST BLK
AST TO BLK BLK REB 3FG FG STL AST TO STL AST PF AST STL 3FG 3FG STL STL FT
AST
52 PF FG FG TO 3FG REB STL AST PF BLK PF PF FG FT FG FT 3FG TO REB FT BLK
FT AST REB TO FG REB FT BLK STL STL BLK TO STL FG TO FT REB FG FT FT BLK
FT AST PF FT TO AST STL 3FG TO AST FG BLK PF STL REB AST STL STL FG 3FG
3FG TO AST STL TO BLK FT FT 3FG FG PF PF PF TO STL STL REB TO REB FT STL
FT FG BLK TO PF BLK FG FG FG BLK REB PF FG FG AST 3FG REB
65 BLK REB REB FG 3FG 3FG PF AST STL REB STL FT PF FG STL STL BLK PF BLK
PF 3FG BLK 3FG BLK FT TO TO REB AST BLK BLK 3FG BLK REB AST REB STL STL TO
REB TO STL REB 3FG REB 3FG FG PF FT FT FT FT 3FG FT BLK FG FG REB
59 3fg 3fg 3fg 3fg 3fg 3fg 3fg 3fg 3fg 3fg fg
61 3fg fg to fg fg stl stl stl stl to to
7 FG FG FG FG FG ST S PF ST ST TO 3FG 3FG 3FG 3FG 3Fg 3fg 3fg 3FG
```

### JUDGES OUTPUT

```
12 25 SOLID
15 0 BENCHED
37 ?? INVALID
171 -33 BENCHED
32 1 BENCHED
12 17 MORE PRACTICE
00 2 BENCHED
1 13 MORE PRACTICE
87 ?? INVALID
17 10 MORE PRACTICE
42 -1 BENCHED
7 -37 BENCHED
19 28 SOLID
52 60 CAREER GAME
65 56 SPORTS CENTER
59 35 SPORTS CENTER
61 5 MORE PRACTICE
7 29 SOLID
```

---

## 5. Line it Up

### JUDGES DATA FILE

```
11
4
green-red blue-green red-blue red-yellow
1
red-blue
3
blue-green red-blue blue-green
10
red-yellow red-green blue-orange green-red blue-red red-blue green-purple
orange-green purple-green yellow-blue
8
red-yellow red-green green-yellow orange-orange blue-red red-blue red-blue
green-yellow
20
black-aqua yellow-gray purple-black biege-yellow green-gray black-green
aqua-purple black-yellow yellow-black orange-cyan red-black biege-yellow
green-green gray-biege gray-gray gray-orange yellow-biege yellow-black
black-red gray-yellow
30
orange-black white-green biege-navy aqua-navy red-biege yellow-white
green-aqua cyan-aqua purple-red aqua-purple purple-red yellow-purple navy-
cyan purple-navy red-aqua red-navy green-blue aqua-black white-green navy-
red black-yellow navy-purple navy-yellow blue-yellow biege-orange black-
gray purple-white green-red gray-purple red-biege
20
yellow-black red-green yellow-aqua purple-black navy-aqua biege-green
gray-aqua gray-black cyan-green white-gray blue-biege biege-aqua blue-blue
green-purple aqua-white yellow-aqua navy-gray aqua-blue aqua-gray orange-
navy
10
red-red red-red red-red red-red red-red red-red red-red red-red red-red
red-red
10
aqua-cyan red-purple red-cyan blue-red navy-cyan black-gray red-biege
orange-purple yellow-orange cyan-blue
30
purple-green orange-biege black-black orange-aqua yellow-yellow aqua-navy
purple-gray navy-yellow purple-yellow red-biege cyan-purple yellow-black
black-black gray-red orange-navy purple-white black-green green-blue navy-
gray black-white orange-yellow red-red white-yellow navy-red red-navy
biege-yellow red-red green-blue orange-white black-navy
```

### JUDGES OUTPUT

```
4
1
2
10
4
20
30
11
10
4
16
```

---

## 6. Morning Person Or Not?

### JUDGES DATA FILE

```
17
AAAAAAAAAA
EEEEEEEEEE
BDBDBDBDBD
XXXXXXXXXX
ABCDEEDCBA
EDCBAABCDE
ABDEEBDBEA
CCECCEXXAA
AAAAAAAAAA
AAAAAAAAAA
EEEEEEEEEE
EEEEEEEEEE
CCCCCCCCCC
CCCCCCCCCC
AAAAAAAAAA
BBBBBBBBBB
XXXXXXXXXX
XXXXXXXXXX
DBCXXCCBD
BXEXDXACEB
BBEABXABEX
CDBEEEXCXC
CBBBBEBXEA
XEAXCBBEED
BABCBXDDCC
ECCDCEEBXC
BBCDEABEEX
BDBAXDDXAC
DEEAEBEAXC
BEEDDCXDEA
ABCDEABCDE
ABCDEAACDE
ABCDEABCDE
ABCDEADCDE
```

### JUDGES OUTPUT

```
1 13
2 9
3 9
4 8
5 0
6 0
7 0
8 3
9 13
10 8
11 10
12 8
13 6
14 9
15 8
16 1
17 2
```



---

## 7. Howdy Neighbor

### JUDGES DATA FILE

```
12
3
4 3
A B C
D E F
G H I
J K L
3
5 7
A B A B A B A
A B A B A B A
A B C B A C A
A B C B A C A
A B A B A B A
5
3 7
A B B C B B A
B C C B C C B
A B B C B A A
1
3 3
A A A
A A A
A A A
10
3 3
A A A
A A A
A A A
3
4 9
C C F D D C B D C
F D D D A A F B B
C F B B F B A D E
B C E A D A B F B
5
4 11
B D A A A A D A A C C
B C C D A B B B C B C
D C B C A D A D A C A
C A D A C A C C B A C
3
13 20
B E C E D F F D E F F D B A E F E F B D
B E C F D E C E B A F C A B F C A E D F
A F F A A E A C E D C A C D D D F C B A
E C E B E C D E E C A F A B C C E D C D
A E A B F A C E F A E A C D F E E C F D
E F F D C C E B D D B D A D C B E F C E
D F C A D B C B D C D B C F D B D E E B
E A C B B B C B D E B A D E F B D E E F
C A D F A A C F A A C B E E C F C B E F
A D A D E A B D E C A E E F D F B A B E
```

---

E E F F A B F F A C C F C C E D F A F A  
F C B C F E B B B D E C E D D A A C A E  
F E A C F D C C B D F D F A A D B E C A  
4  
3 5  
A A A A A  
B B C B B  
A A A A A  
4  
4 5  
A B A B A  
B A B A B  
A B A B A  
B A B A A  
1  
4 3  
A B C  
D E F  
G H I  
J K L  
4  
3 5  
A A B C D  
C D E F G  
H I J A A

#### **JUDGES OUTPUT**

0 0 0 0  
5 6 5 6  
0 1 2 3  
1 1 1 1  
0 0 0 0  
1 2 3 4  
1 2 3 3  
15 17 30 31  
2 2 2 2  
0 1 2 2  
12 12 12 12  
0 0 0 1

---

## 8. Moneyball

### JUDGES DATA FILE

```
10
1513 542 44 162 64 2351 57 39 169 5532 762
10 0 0 10 0 40 0 0 0 50 10
20 3 0 10 1 50 0 0 0 100 14
1439 569 30 67 66 1983 200 91 110 5455 685
60 3 0 10 1 90 0 0 0 100 14
60 3 0 10 1 90 0 0 50 100 14
1409 539 56 153 52 2202 96 24 108 5579 713
1644 642 22 148 50 2615 90 64 90 5354 976
1591 622 58 171 51 2489 100 31 140 5691 860
1591 622 58 171 51 2489 100 31 210 5691 860
```

### JUDGES OUTPUT

```
773 UNLUCKY
10 VALID
13 LUCKY
678 LUCKY
43 UNLUCKY
18 UNLUCKY
728 UNLUCKY
978 UNLUCKY
880 UNLUCKY
858 LUCKY
```

---

## 9. The Meta Question

### JUDGES DATA FILE

6  
t1 1 C t5 1 C t1 2 I t2 12 C t2 10 I t2 10 I t2 10 I t2 10 I t2 10 I t2 10 I  
I t2 10 I t2 10 I t2 10 I t2 10 I t2 10 I t2 10 I t2 10 I t2 10 I  
t2 10 I t2 10 C t1 1 I t2 10 I t5 10 I t5 10 I t5 10 C  
  
west 1 C west 5 C west 12 C east 2 C east 3 C east 10 C north 3 I north 5  
I north 12 I south 5 I north 12 I south 5 C south 5 C south 10 I  
  
1 4 I 1 2 I 1 1 I 1 5 I 1 8 I 2 7 I 4 9 I 3 10 I 4 12 I 4 1 I  
  
1 1 I 1 1 I 1 1 I 1 1 I 1 1 I 1 1 I 1 1 I 1 1 I 1 1 I 1 1 I 1 1 I 1  
1 I 1 1 I 1 1 I 1 1 I 1 1 I 1 1 C 2 1 C 2 2 C 2 3 C 2 4 C 2 4 I 2 4 C 2 5  
C 2 6 I 2 6 C 2 7 C 2 7 I  
  
1 1 C 1 2 C 1 3 C 1 4 C 1 5 C 1 6 C 1 7 C 1 8 C 1 9 C 1 10 C 1 11 C 1 12 C  
2 1 I 3 3 I 3 5 I 3 12 I  
  
2 12 I 2 6 I 1 10 I 2 4 C 5 4 I 5 11 C 3 3 I 3 10 I 2 10 C 3 1 I 1 6 C 4 4  
I 1 8 I 5 6 I 3 3 I 1 5 C 1 9 I 3 1 C 1 3 I 3 10 I 5 4 I 2 9 I 4 1 I 3 4 I  
5 2 C 1 8 I 3 8 I 1 3 I 3 7 I 3 9 C 2 5 I 1 3 I 1 8 I 1 12 C 2 11 I 5 6 I  
5 1 C 4 10 I 5 3 I 5 6 I 4 11 I 1 3 I 3 12 I 1 7 C 4 7 I 4 9 C 3 6 I 1 8 I  
4 6 I 3 10 I 2 6 I 1 10 I 5 12 C 3 12 C 1 8 I 1 1 I 4 5 C 2 9 I 1 1 C 1 8  
I 5 9 I 3 5 I 3 2 C 3 4 I 1 8 I 1 8 I 2 2 I 5 8 C 5 10 I 4 1 C 2 5 C 3 11  
I 4 4 I 4 4 I 4 7 C 2 7 C 1 2 C 2 12 I 1 4 I 3 5 I 4 2 I 5 6 C 4 10 I 5 10  
I 5 9 C 4 6 I 3 6 I 2 3 I 5 10 I 4 6 I 4 12 I 1 3 I 2 8 C 3 10 C 5 3 I 1  
10 I 3 7 I 3 3 I 3 8 I 1 10 I 5 10 I 5 5 I 5 10 C 1 8 C 1 9 I 5 5 I 4 3 C  
3 3 I 2 11 C 1 3 I 1 4 I 3 11 I 3 8 C 2 9 I 2 3 I 3 4 I 1 9 I 1 10 I 4 6 I  
4 4 I 3 5 I 4 12 C 3 5 I 5 5 C 1 4 C 3 6 I 4 6 I 2 6 C 4 10 I 4 2 I 4 10 C  
4 11 I 1 9 I 4 4 I 2 12 I 5 7 C 4 6 I 3 11 I 4 8 I 2 2 I 3 7 C 1 11 C 4 6  
I 1 10 I 3 6 I 1 10 I 3 3 I 3 3 C 1 10 I 1 9 I 5 4 I 4 2 I 4 2 C 3 11 I 2  
1 I 5 3 I 4 11 C 1 3 C 2 3 I 5 3 I 2 1 I 3 5 I 3 4 C 4 4 C 2 1 I 2 2 I 5 3  
I 4 8 C 2 12 C 5 3 I 4 6 C 2 9 I 3 11 I 3 5 C 3 6 I 1 9 I 5 3 C 2 1 I 1 9  
I 3 11 C 5 4 I 1 10 I 1 10 I 1 10 I 2 9 I 2 9 C 3 6 C 1 9 I 2 3 I 5 4 I 1  
10 C 2 2 C 2 3 C 2 1 I 5 4 C 1 9 I 1 9 I 1 9 I 2 1 C

### JUDGES OUTPUT

1  
t5 110  
t1 60  
t2 40  
2  
east 180  
west 180  
south 55  
north 0  
3  
1 0  
2 0  
3 0  
4 0  
4  
2 415

---

1 -25  
5  
1 720  
2 0  
3 0  
6  
5 615  
2 600  
4 600  
3 560  
1 520

---

## 10. Square Free Integers

### JUDGES DATA FILE

```
13
10
18
2
2500
731324180
100
4
15284
212349600
212349373
212345713
1212349650
1212346433
```

### JUDGES OUTPUT

```
FREE
NOT 9
FREE
NOT 2500
NOT 146264836
NOT 100
NOT 4
NOT 4
NOT 32400
FREE
NOT 22801
NOT 235225
FREE
```

---

## 11. Romancing the Stones

Program Name: Stones.java

Input File: stones.dat

JUDGES DATA FILE

```
26
3 9
1 1 3 2 2 2 4 2 1
3 8
2 2 1 3 3 4 1 2
2 10
2 1 3 1 4 1 2 2 1 3
3 13
2 2 1 5 10 2 5 3 2 1 1 1 1
3 11
5 3 1 6 9 7 10 5 3 5 3
4 9
1 1 3 2 2 2 4 2 1
5 11
1 1 1 2 1 1 1 2 1 3 1
3 12
4 1 5 1 3 2 1 4 3 1 1 2
1 1
98765
1 10
1 2 3 4 5 6 7 8 9 10
10 20
10 9 10 9 10 9 10 9 10 9 10 9 10 9 10 9 10 9 10 9
4 13
2 2 2 10 2 2 2 2 2 5 5 2 2
4 13
2 2 2 10 2 2 2 5 2 2 5 2 2
6 4
1 1 1 1
2 12
4 4 2 3 4 4 3 3 2 1 4 2
3 12
4 4 2 3 4 4 3 3 2 1 4 2
4 12
4 4 2 3 4 4 3 3 2 1 4 2
2 15
1 3 1 2 1 2 1 2 3 2 2 1 2 3 2
3 15
1 3 1 2 1 2 1 2 3 2 2 1 2 3 2
4 15
1 3 1 2 1 2 1 2 3 2 2 1 2 3 2
2 20
3 2 1 2 1 2 1 3 1 1 2 1 3 2 3 3 2 2 2 1
3 20
3 2 1 2 1 2 1 3 1 1 2 1 3 2 3 3 2 2 2 1
4 20
3 2 1 2 1 2 1 3 1 1 2 1 3 2 3 3 2 2 2 1
2 20
1 2 1 1 1 2 1 1 2 2 1 1 1 1 1 1 1 2 1 2
3 20
1 2 1 1 1 2 1 1 2 2 1 1 1 1 1 1 1 2 1 2
4 20
```

---

1 2 1 1 1 2 1 1 2 2 1 1 1 1 1 1 1 2 1 2

**JUDGES OUTPUT**

1 CUT  
2 WHOLE  
3 CUT  
4 CUT  
5 WHOLE  
6 WHOLE  
7 CUT  
8 WHOLE  
9 CUT  
10 CUT  
11 CUT  
12 CUT  
13 WHOLE  
14 WHOLE  
15 WHOLE  
16 WHOLE  
17 WHOLE  
18 CUT  
19 WHOLE  
20 WHOLE  
21 CUT  
22 WHOLE  
23 WHOLE  
24 CUT  
25 WHOLE  
26 WHOLE



---

## 12. Fight Song

### JUDGES DATA FILE

NONE

### JUDGES OUTPUT

```
1 4
Texas Fight, Texas Fight,
2 6
Texas Fight, Texas Fight,
And it's goodbye to A&M.
3 10
Texas Fight, Texas Fight,
And it's goodbye to A&M.
Texas Fight, Texas Fight,
4 11
Texas Fight, Texas Fight,
And it's goodbye to A&M.
Texas Fight, Texas Fight,
And we'll put over one more win.
5 15
Texas Fight, Texas Fight,
And it's goodbye to A&M.
Texas Fight, Texas Fight,
And we'll put over one more win.
Texas Fight, Texas Fight,
6 20
Texas Fight, Texas Fight,
And it's goodbye to A&M.
Texas Fight, Texas Fight,
And we'll put over one more win.
Texas Fight, Texas Fight,
For it's Texas that we love best.
7 21
Texas Fight, Texas Fight,
And it's goodbye to A&M.
Texas Fight, Texas Fight,
And we'll put over one more win.
Texas Fight, Texas Fight,
For it's Texas that we love best.
Hail, Hail, The gang's all here,
8 25
Texas Fight, Texas Fight,
And it's goodbye to A&M.
Texas Fight, Texas Fight,
And we'll put over one more win.
Texas Fight, Texas Fight,
For it's Texas that we love best.
Hail, Hail, The gang's all here,
And it's good-bye to all the rest!
```