

Spring 2018 CGS Programming Contest

Judges Data

Problems:

0. [Sample Problem](#)
1. [Hexagons](#)
2. [Anti-RPS](#)
3. [Tournament](#)
4. [Artifacts](#)
5. [Cups and Swaps](#)
6. [Chess](#)
7. [Outlier](#)
8. [Street Crossing](#)
9. [Trophies](#)
10. [Password](#)
11. [Sequence](#)
12. [Tower](#)
13. [Traffic Lights](#)
14. [Mirrors and Lasers](#)
15. [Battery](#)

0. Sample Problem

Input File: soup.txt

Input:

0

Output:

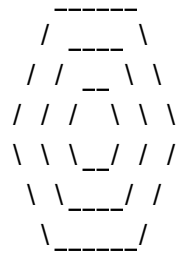
0.00

1. Hexagons

Input:

N/A

Output:



2. Anti-RPS

Input:

RRRPPPSSSPR

Output:

SSRRRPPPRS

3. Tournament

Input:

4
1
2
42
1000

Output:

0
4
4284
2497000

4. Artifacts

Input:

6
0 0 1 1 10 10 5 6 6 5 12 9

Output:

35

5. Cups and Swaps

Input:

<50 lines of input>

Output:

7

6. Chess

Input:

```
3
Q0000000
00000000
00000000
00000000
00000000
00000000
00000000
00000000

00000000
00000000
00XX0000
00XQX000
00XX0000
00000000
000X0000
00000000

XXXXXXXX
X0X0000X
X0X0000X
X0XX000X
X000000X
X0Q00X0X
X000X00X
XXXXXXXX
```

Output:

```
21
0
12
```


7. Outlier

Input:

```
4 7
2 1 1 1 1 1 1
2 4 8 8 10 12 14
10 20 39 40 50 60 70
1 2 3 4 5 6 8
```

Output:

```
1
3
3
7
```

8. Street Crossing

Input:

3
3
3 1
3 2
3 0
6
12 0
12 2
12 4
12 6
12 8
12 10
5
9 5
7 1
5 0
6 3
4 2

Output:

-1
1
7

9. Trophies

Input:

3

7 3

8 64

9 99

Output:

1

272333

84392484

10. Password

Input:

```
3
3 6
a ab abc
5 8
a aa b le babble
5 9
a b c d e
```

Output:

```
24
985
1953125
```

11. Sequence

Input:

5
37
253162576002
974169314159
491641251169
562539601711

Output:

False
True
True
False
True

12. Tower

Input:

```
12
400 600 800
1 1 1
2 20 2
500 500 500
125 225 230
240 220 40
16 2 4
6 2 16
300 300 300
40 40 160
17 3 1
200 20 20
```

Output:

```
2288
```

13. Traffic Lights

Input:

```
3
6
000000
000000
000000
000000
000000
000000
8
01123581
32134558
91442333
77610987
15972584
41816765
10946177
11286570
10
1415926535
8979323846
2643383279
5028841971
6939937510
5820974944
5923078164
0628620899
8628034825
3421170679
```

Output:

```
9.0
16.8
29.9
```

14. Mirrors and Lasers

Input:

```
63 91 12 4
0 63 14 77
49 49 49 35
49 35 35 35
21 63 7 63
28 84 35 84
49 70 56 70
42 84 49 84
42 77 49 77
56 84 56 91
14 84 28 70
0 18 7 18
13 30 15 24
9 13
3 7
2 2
200 900
```

Output:

```
0
4
-1
8
```


15. Battery

Input:

<over 2500 characters of input>

Output:

408

100

1778

0

11524800

4726476972