
1. Base Three

Program Name: Base3.java

Input File: base3.dat

Judges Input File

MAO
MMAAOO
MAOMAO
OMOAO
MAMA
MAMAOO
AOMA
AAAMMO
AMAMAM
OAMOAM
MAOOAM

Judges Output to Screen

6
288
168
24
20
180
-25
-339
-182
-56
160

2. Duplicate Vowels

Program Name: Duplicates.java

Input File: duplicates.dat

Judges Input File

```
20
SACRILEGIOUS
AUTOMOBILE
AUTOECIOUSLY
ADENOCARCINOMATOUS
ANTIRELIGIOUS
AAABUUUUBEEEEOOOIIIIJOOOZZZUUU
AAABEEEEIIIIJOOOZZZUUU
AUTOECIOUS
AUTOECIOUSLY
FACETIOUSNESSES
SACRILEGIOUS
SACRILEGIOUSNESS
ULTRASERIOUS
MAJESTIOUS
PARECIOUS
CUUUAAAHIIIIKEEEEPOAICUUAI
PLACENTIOUS
ABOUT
BIGGERTHANLIFE
ELEPHANTNOSE
```

Judges Output to Screen

```
YES
NO
YES
YES
YES
YES
YES
YES
YES
YES
YES
YES
YES
YES
YES
YES
YES
YES
YES
NO
YES
NO
NO
NO
```

3. Exponents

Program Name: Exponents.java

Input File: exponents.dat

Judges Input File

```
2 16
3 243
11 3138428376721
17 24137569
13 302875106592253
7 13841287201
2 2
19 799006685782884121
```

Judges Output to Screen

```
4
5
12
6
13
12
1
14
```

4. Four of a Kind

Program Name: FourKind.java

Input File: fourkind.dat

Judges Input File

```
10
MARY 4 4 4 4 3
JOAN 4 4 4 2 3
ART 3 3 3 2 1
RON 4 4 4 4 1
ALEX 4 3 4 4 4
CHEZ 2 6 6 6 3
AMY 4 4 4 4 5
REX 4 5 4 4 4
RICK 2 2 4 2 3
GEORGE 5 4 5 4 1
JOHN 5 5 4 5 3
DICK 1 2 3 4 5
ANN 3 3 3 3 1
NAN 3 4 3 3 3
JAN 3 3 3 3 6
HARRY 1 1 3 1 1
JERRY 1 1 1 3 1
LARRY 1 3 1 1 1
ALAN 3 2 3 2 3
ALICE 4 6 6 4 4
AL 4 6 6 6 4
JOE 6 6 5 6 6
JOHN 4 5 5 5 5
JILL 4 4 4 3 4
NED 1 3 3 3 3
TED 4 4 4 4 4
FRED 3 3 3 1 3
LISA 6 6 6 5 6
DENISE 4 4 4 4 4
ALI 6 5 6 6 6
```

Judges Output to Screen

```
MARY
ALEX
TIE AMY REX
NO WINNER
JAN
TIE HARRY JERRY LARRY
NO WINNER
JOE
TIE FRED NED
TIE ALI LISA
```

5. House Numbers

Program Name: House.java

Input File: house.dat

Judges Input File

```
10
35 25 111
45 40 2104
11 11 32
33 32 1515
34 21 222
12 9 4545
43 33 1007
10 10 128
2 1 12
22 35 8
```

Judges Output to Screen

```
1101111 $1.85
100000111000 $5.20
100000 $0.66
10111101011 $3.55
11011110 $1.94
1000111000001 $1.41
1111101111 $3.40
10000000 $0.80
1100 $0.06
1000 $1.01
```

6. Let's Make a Deal

Program Name: LetsDeal.java

Input File: letsdeal.dat

Judges Input File

```
13
100 200 300 2 1 3
400 200 10 3 2 1
700 700 700 1 2 3
200 100 300 3 2 1
200 100 300 1 2 3
200 100 300 2 3 1
200 100 300 1 3 2
200 100 300 3 1 2
4 3 2 1 2 3
3 2 4 1 2 3
2 3 4 1 2 3
1 2 3 3 2 1
3 2 1 2 1 3
```

Judges Output to Screen

```
3 WON
2 LOST
2 WON
1 LOST
3 WON
3 WON
3 WON
2 LOST
3 LOST
3 WON
2 LOST
1 LOST
1 WON
```

7. Lockers

Program Name: Lockers.java

Input File: lockers.dat

Judges Input File

```
8
500 1000 859 575 600 650 732 840 950 850 900 875 859
100 400 150 300 350 200 175 125 400 150
1000 2000 1575 1428 1300 1400 1450 1700 1600 1500 1575
500 700 650 650
1 100 50 50
200 900 675 235 555 755 455 355 345 725 700 650 675
200 300 250 251 249 240 260 250
900 1000 925 950 900 915 935 930 920 925
```

Judges Output to Screen

```
600 WARMER
650 WARMER
732 WARMER
840 WARMER
950 COLDER
850 WARMER
900 COLDER
875 WARMER
859 FOUND

350 COLDER
200 WARMER
175 WARMER
125 SAME
400 COLDER
150 FOUND

1300 COLDER
1400 WARMER
1450 WARMER
1700 SAME
1600 WARMER
1500 COLDER
1575 FOUND

650 FOUND ON FIRST TRY

50 FOUND ON FIRST TRY

555 WARMER
755 WARMER
455 COLDER
355 COLDER
345 COLDER
725 WARMER
700 WARMER
650 SAME
675 FOUND

249 SAME
240 COLDER
260 SAME
```

250 FOUND

900 SAME

915 WARMER

935 SAME

930 WARMER

920 SAME

925 FOUND

8. Lucky Number

Program Name: Lucky.java **Input File:** none

Input File: none

Judges Input File

There is no input for this problem.

Judges Output to Screen

[illegible]

9. Money: Brother Can You Spare a Hammer?

Program Name: Money.java

Input File: money.dat

Judges Input File

```
17
5
13
77
200
9999
10
512
1000
1
6
8
500
4242
13
14
2001
2010
```

Judges Output to Screen

```
1
2
13
54
93535
2
287
1001
1
1
2
273
17052
2
3
3861
3915
```

10. Realtor World

Program Name: Realtor.java

Input File: realtor.dat

Judges Input File

```
5
4 4
0 -2 -7 0
9 2 -6 2
-4 1 -4 1
-1 8 0 -2
4 6
3 3 -3 -3 4 -4
2 8 3 8 9 10
-4 -4 3 7 -5 3
6 2 -2 4 -6 8
5 5
-5 3 -2 4 -2
-2 3 2 -2 3
3 -2 1 3 -2
-1 9 -1 7 2
7 -3 -3 2 -4
4 4
1 1 1 1
1 1 1 1
1 1 1 1
1 1 1 1
5 6
-1 -1 -1 -1 -1 -1
-1 -1 -1 -1 -1 -1
-1 -1 1 -1 -1 -1
-1 -1 -1 -1 -1 -1
-1 -1 -1 -1 -1 -1
```

Judges Output to Screen

```
15
52
26
16
1
```

11. Target Practice

Program Name: Target.java

Input File: target.dat

Judges Input File

```
6 4
PYLE (3,4) (5,4) (0,0) (4,1) (10,11)
ANDY (1,5) (-1,-2) (3,3) (-4,4) (0,1)
DON (0,2) (-2,0) (1,0) (2,3) (-2,1)
MATT (10,0) (-5,-5) (5,2) (0,0) (0,0)
WAYNE (0,0) (1,1) (0,1) (1,0) (-1,0)
ROCK (25,30) (95,-95) (-10,99) (-99,-99) (-75,0)
(0,0)
(15,-10)
(-99,-99)
(37,-42)
```

Judges Output To Screen

```
TARGET 1 WAYNE 2
TARGET 2 MATT 45
TARGET 3 ROCK 281
TARGET 4 MATT 160
```

12. Treasure Hunt

Program Name: Treasure.java

Input File: treasure.dat

Judges Input File

```
8
5
3 6
.....
.000900.
*100000.
.161101.
.....
8
5 7
.....*
.9000112.
.0102045.
.0701020.
.8412302.
.3332221.
.....
12
10 12
.....
.9999000000001.
.9999000000001.
.9999000000001.
.0000000000000.
.0000000000000.
.0000000000000.
.0000000000000.
.0000000000000.
.0000000022222.
.0001111111111.
*.....
7
4 6
.....
.900000.
.000000.
.000000.
.000010.
.....*.
10
5 5
...*...
.00000.
.00000.
.00000.
.00000.
.00000.
.....
11
6 7
.....
.2119585.
.0074494.
```

```
.1595029.
.9925116*
.9216597.
.1704343.
.....
9
10 12
.....
.999900000001.
.999900000001.
.999900000001.
.999900000001.
.000000000000.
.000000000000.
.000000000000.
.000000000000.
.000000000000.
.000000000000.
.000000022222.
.000222222221.
*.....
15
5 6
.....
.990000.
.900000.
.000000.
.002022.
.022223.
..*.....
```

Judges Output to Screen

```
10
18
36
1
0
75
10
44
```