

Queens Revised

Queens have always hated each other. Traditionally when queens were placed on a chessboard a queen gets jealous of another if:

1. They are both in the same row.
2. They are both in the same column.
3. They can see each other diagonally i.e lie in a line inclined 45 degrees or 135 degrees to the base of board.

But now the hatred has increased and the new condition is that **no three of them should lie in any straight line (*this line need not be aligned 45 degrees or 135 degrees to the base of chess board*)**.

Scoring and Judging :

The task before you is to place N queens on an N x N chess board so that none of the earlier three conditions and the new condition is violated.
Write a program in a language of your choice to print a "N" followed by a space separated list of column number of queens corresponding to each row.
If the configuration is correct you get a score of N/10. (Please do not submit for N > 1000 and N should be odd).

Sample Example

A valid configuration for N = 11 :

```
* Q * * * * * * * * *
* * * Q * * * * * *
* * * * * Q * * * *
Q * * * * * * * * *
* * * * * Q * * *
* * * * * * * * Q
* * * * Q * * * * *
* * Q * * * * * * *
* * * * * * * Q *
* * * * * Q * * * *
* * * * * * * * Q *
```

for N = 13

```
Q * * * * * * * * *
* * Q * * * * * * *
* * * * * * * * Q *
```

```

*****Q*****
*****Q*****
*Q*****
*****Q**
****Q*****
*****Q*****
*****Q
*****Q*****
***Q*****
*****Q*****

```

So if the output of your program is :

```

11
2 4 7 1 8 11 5 3 9 6 10

```

You get a score of $11/10 = 1.1$

and for the output :

```

13
1 3 12 10 7 2 11 5 8 13 9 4 6

```

you get a score $13/10 = 1.3$

A Sample Invalid Configuration

```

Q*****
**Q****
****Q**
*****Q
*Q*****
***Q****
*****Q*

```

Queens of the first three rows are in a straight line.

So if your program's output is:

```

7
1 3 5 7 2 4 6

```

Score is 0.

Try to solve for as large N as possible.

Sample Programs :

C++ :

```
#include
using namespace std;

int main(){
    cout << "11\n" ;
    cout << "2 4 7 1 8 11 5 3 9 6 10" ;
    return 0 ;
}
```

Score = 1.1

Python :

```
print "13"
print "1 3 12 10 7 2 11 5 8 13 9 4 6"
```

Score = 1.3

Note: There is no "Compile and Test" Option. Submit the code directly to get the appropriate score.