

## Problem Statement

*This challenge is sponsored by the IEEE Women in Engineering.*

Find an input which will make the provided Java program give the highest output. An equivalent Python v.3 program is also provided. The programs are accessible via the "Programs" tab in the ribbon above with options: "Problem", "Submissions", "Leaderboard", "Discussions", and "Programs"

The best solution will get a full score, while others will receive an exponentially decaying score: losing 1% of the score for each unit decrease in the output.

## Input Format

None.

## Output Format

Your program should produce a legal input for the Java (or Python equivalent) program listed in the "Programs" tab.

The first line of of your solution's output should be a non-negative integer  $N$  representing the number of lines to follow.

The following  $N$  lines should each contain exactly 10 non-whitespace characters.

## Sample Output

```
2
Abcde_!@#
0#T234<>?,
```

## Explanation

No input will be provided to your program. Your program should produce a fixed output according to the instructions provided above which will be then automatically provided as input to the given Java (or Python equivalent) program. For example, in this case, we may assume that you have written a program that outputs the 3 lines provided above as the *Sample Output*. This program outputs a value of 2 for  $N$ , and then two lines follow with 10 characters each.

When this output is provided as input to the Java program, it outputs a value equal to 998. As it turns out, this is not a very good input. The score for our solution would be:

$$0.99 \text{ } MaxScore - 998$$

where  $MaxScore$  is the maximum possible score for this challenge.

$MaxScore$  is large enough that this rounds to zero.

Note: The scores will be rounded to two decimal places.