

TCG HW. 1 Result

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Grading Policy: Overall

- The homework is composed of 3 parts. Suppose you get S_i points in part i and receive P penalties throughout the homework, your raw score S_0 is defined as

$$S_0 := \max\{S_1 + S_2 + S_3 - P, 0\}.$$

- Suppose you submit your homework D days late, your score S is given by

$$S := LS_0,$$

where $L := \llbracket D \leq 7 \rrbracket (0.9^{\lceil D \rceil})$ denotes the lateness coefficient.

Grading Policy: Part I

- Suppose your Sokoban solver solves a puzzle file F correctly within 60 seconds, and the puzzle file is worth P points, with p puzzles in it.

Let

- ν_i denote the optimal number of moves of a solution to puzzle i , and
- n_i denote the number of moves of your solution to puzzle i .

Then the basic score is defined as

$$\sigma_1(F) := \frac{P}{2} + \frac{1}{2Pp} \sum_{i=1}^p \left\lfloor \frac{\nu_i}{n_i} \right\rfloor$$

- Suppose it takes t_1 and t_2 seconds for your solver to solve `medium.in` and `large.in` respectively. Then the time bonus is given by

$$\tau_1 := \llbracket t_1 \leq 1 \rrbracket + \llbracket t_2 \leq 1 \rrbracket.$$

- You get

$$S_1 := \min \left\{ \sum_F \sigma_1(F) + \tau_1, 8 \right\}$$

points in this part.

Grading Policy: Part II

- You get

$$S_2 := 2\llbracket \text{your puzzle passes verifier} \rrbracket \\ + \llbracket \text{your puzzle is considered complex} \rrbracket$$

points in this part.

Grading Policy: Part III

- To get the full score, your report should contain
 - how to compile/run your code,
 - your algorithm,
 - your experiment,
 - complexity analysis of Pukoban, your puzzle and your algorithms.

Grading Policy: Penalty

- You'll receive some penalties if you don't follow `hw1_spec.pdf`.
 - Your solver doesn't read from `stdin`.
 - Your solver doesn't read until the EOF.
- If your directory hierarchy is wrong, you won't receive any penalty in this homework.
- If your submission can be run on linux environment but not the workstation, you won't receive any penalty in this homework.

Submission

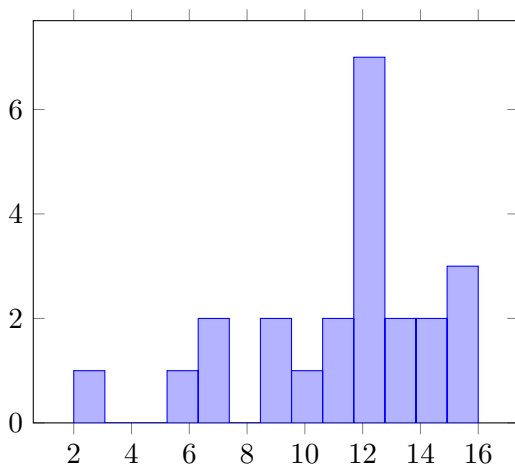
- Total Submitter: 23
 - C++11: 21
 - C++14: 1
 - C: 1

Penalty

0.5 points will be deducted if at least one of the following situation occurs when judging your submission ...

- I/O incorrect: 8
- Cannot make: 3
- Type-o in include: 1

Score Distribution

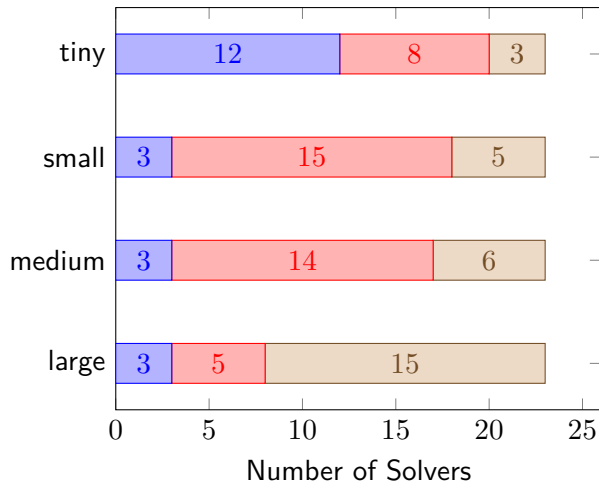


Min: 2.916, Max: 16, Avg: 11.20, Median: 11.91, Stdev: 3.47

Score Distribution

- B05 Submitter: 7
 - Avg.: 11.2714
 - Std. Dev.: 4.4
- R07 Submitter: 8
 - Avg.: 11.5734
 - Std. Dev.: 3.2
- R08 Submitter: 8
 - Avg.: 10.9889
 - Std. Dev.: 2.7

Execution Times



■ ≤ 1 second ■ ≤ 60 seconds ■ TLE or SEGFAULT