Programming Arena ver1.0

Tutorial

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1. What is Programming Arena?

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	Arena Arenas * Coordinate	aizu_z Logout Sign Up	h.
	Programming Arena This is the 8 version of Arena for Alzu Online Judge 2.0. CONTEST C VIRTUAL C USE VIRTUAL C C CONTEST C C CONTEST C C C C C C C C C C C C C C C C C C C	XERCISE 🛃	
	Alzu Online Judge 2.0 API	Page Top	~

https://onlinejudge.u-aizu.ac.jp/beta/arena.html

Programming Arena is a tool to organize arenas each of which consists of a set of problem from Aizu Online Judge (AOJ). There are three types of arenas as follows:

- **Exercise** : Oriented towards introduction to programming and algorithms which use elementary or typical problems from Courses
- Virtual : Oriented towards virtual programming contests witch use past problems from Challenge
- Contest : Oriented towards real programming contests which use original problem sets

There are three roles in Arena as follows:

- **Participants** : Users who solve problems in Arenas. Students and competitors.
- **Coordinators** : Users who create and manage Exercises and Virtuals. Teachers and coaches.
- Manager : The admin who can create and manage Contests. (* now AOJ admin)

2. Entrance of Arena

You can browse a list of Arenas from the top page of Programming Arena. Generally, participants enter an Arena via URL given from its Coordinator.

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	UoA_ALDS1_2019_C34_13	University of Aizu Algorithms and Data Structures 2019 Topic 13	2020/1/31 13:20:00	2020/2/7 13:20:00	F0118T	public Finished	
	UoA_ALDS1_2019_C12_13	University of Aizu Algorithms and Data Structures 2019 Topic 13	2020/1/30 15:10:00	2020/2/6 15:10:00	F0118T	public Finished	
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3. Activities in Arena: Participants

Login and Entry

Home provides a basic information of the arena. First of all, users need to login to Programming Arena with AOJ ID. Then a participant has to enter the Arena through ENTRY to solve problems. If the Arena is private, he/she must input its password given by the Coordinator.

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A Home Problems	pace \equiv Submissions JF Ranking i Board Lt Analysis A Rejudge	Ţ	
ID:	UoA_ALDS1_2019_C12_02	8	
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Start Time:	2019/12/9 15:10:00		
End Time:	2019/12/16 15:10:00		
Current Time:	2020/4/8 19:42:44		
Coordinator:	F0118T		
Information:			
Comments:			
State:	Finished		
	Lentry		

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Problem

You can see a list of problems given by the arena.

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Insertion Sort	Greatest Common Divisor	Prime Numbers	Maximum Profit A0JALDS1_1_D	
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You can click a panel (or link) to browse the problem description.

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12/5 15:10:00	2128:06:07	2020/7/2 15:10:00
Home Problems ✓ Workspace Ξ Submissions J ^F Ranking	Board 🖻 Analysis 🔺 Rejudge	11 1
Problem A Time Limit: 1 sec. Memory Limit: 131072 KB		
挿人ソート		
挿入ソート(Insertion Sort)は、手持ちのトランプを並び替えるとき	こ使われる、自然で思い付きやすいアルゴリズムの1つで	す。片手に持ったトランプを左から小さい順に並べ
る場合、1枚9フカートを取り出して、それをその時息ですでにソート	されている亚のの適切な位置に押入していくことによう(、カートを並べ資えることができます。
挿入ソートは次のようなアルゴリズムになります。		
1 insertionSort(A, N) // N個の要素を含む0-オリジンの配列A		
2 for i が 1 から N-1 まで		
3 v = A[i]		
4 J=1-1 5 while j >= 0 かつ A[j] > v		
6 A[j+1] = A[j]		
7 j		
0 x[]+1] = v		
N 個の要素を含む数列 A を昇順に並び替える挿入ソートのブログラム? こちゅータ計算フニップでの取利 (ユーカ克後の並びた) タミの加速が終	を作成してください。上の疑似コードに従いアルゴリズム	
$\sim 1 \sim 1 \simeq 1 $	てした直絶の並びり を出力してくたさい	を実装してください。アルゴリズムの動作を確認す
るため、各計算ステップでの配列(入力直後の並びと、各Tの処理が終	了した直後の亚ひ)を出力してくたさい。	を実装してください。アルゴリズムの動作を確認す
るため、各計算ステックでの配列(入力値後の並びと、各主の処理が終 入力	了した直後の亚び)を出力してくたさい。	を実装してください。アルゴリズムの動作を確認す
るため、各計算入テラブでの配列(入力値後の皿UCC、各主の必要加加 入力	了した直後の亚び)を出力してくたさい。	を実装してください。アルゴリズムの動作を確認す
るこめ、各計算ステックでの配列(入力自後の通びと、各下の処理が終 入力 入力の最初の行に、数列の長さを表す整数 № が与えられます。2 行目(了した直後の亚ひ)を出力してくたさい。 	を実装してください。アルゴリズムの動作を確認す

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力例 2 に対する出力		
2 3 2 3 2 3		
Note		
Algorithm		
	✓ SUBMIT	

If the Arena is EXERCISE, links to commentary are available (if any) within the problem description.

You can move to Workspace with the corresponding problem ID through SUBMIT button.

Workspace



The Workspace is to submit source codes and check verdict for the selected problem. You can see your progress state at the top of the Workspace.

When you submit your source code, please confirm the problem ID and programming language you use. Select the source code from CHOOSE FILE then the source code is shown in the Source Code area. Then, you can submit the code by SUBMIT button.



When the verdict becomes available, the judge result is shown in the Status (please see AOJ tutorial for details of status).

You can browse test cases (judge data) from SHOW DETAILS.

Here are the details of judge status.

Result	Details of the status
CE COMPILE ERROR	Compiler the judge uses has failed to compile your program. Please see error messages from the judge. If you need, please see the version of compilers at System Information.
RE RUNTIME ERROR	Your program has failed during the execution. Possible causes include: out of range in pointer reference (Segmentation Fault), stack overflow (infinite recursive functions), division by zero and many others. Note that, the main function in C language should return 0.
TLE TIME LIMIT EXCEEDED	The CPU time your program has run has exceeded the time limit specified by the corresponding problem. Note that, the judge runs your program up to around the Time Limit +1 seconds, and the judge may be forcibly terminated around 40 seconds with Runtime Error.
MLE MEMORY LIMIT EXCEEDED	The maximum amount of memory that your program has used has exceeded the limit specified for the corresponding problem.
OLE OUTPUT LIMIT EXCEEDED	Your program has produced too much output.
WA WRONG ANSWER	Your program has produced the output which is different from the judge data. In the case of special judges, the judge may return Wrong Answer depending on results of validators prepared for the corresponding problem.
PE PRESENTATION ERROR	Your program is almost accepted but not perfect. Your program outputs extra spaces or blank lines, and/or does not output required spaces or blank lines.
AC ACCEPTED	Your program has been "accepted" since it has not failed into all the above mentioned conditions.

Ranking

You can browse status of all participants through the leaderboard. The participants can be sorted by their scores or IDs.



Board

Board is for Q&A and clarification between participants and coordinators.

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689	Ν						kupc_official	announce	public	2020/3/20 13:12:14		
690	D	D問題のテストケ	ース不備に伴う!	リジャッジにこ	ついて		kupc_official	announce	public	2020/3/20 14:38:41		
693	Ν	与えられる入力は	ランダムではなく	、恣意的であ	ある場合がな	ありますか?	team_tsukukoma	question	public	2020/3/20 16:09:16		
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