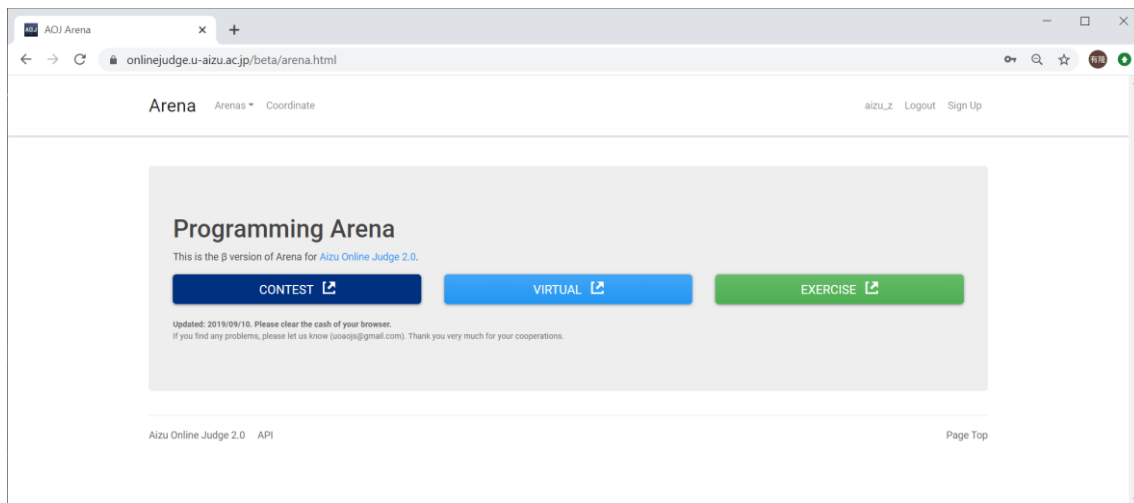


# **Programming Arena** ver1.0

## **Tutorial**

# 1. What is Programming Arena?

<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:

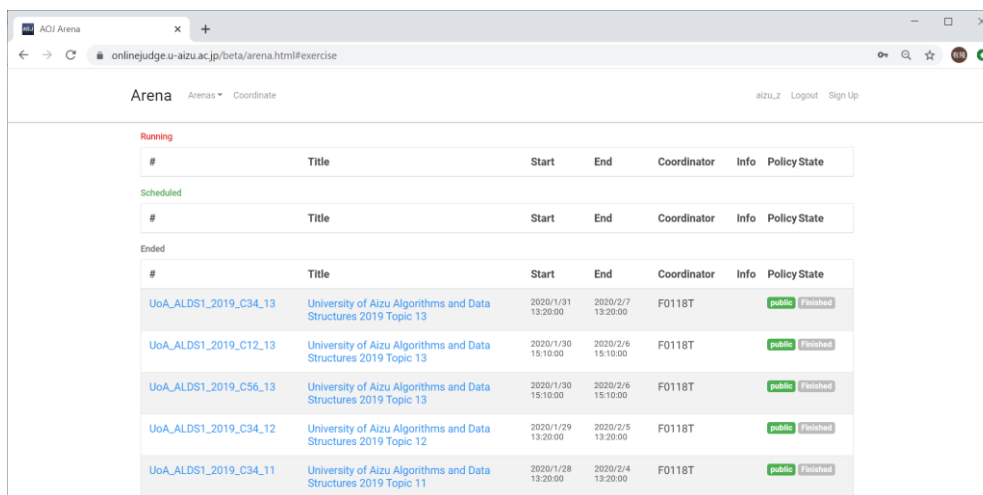
- **Exercise** : Oriented towards introduction to programming and algorithms which use elementary or typical problems from Courses
- **Virtual** : Oriented towards virtual programming contests which use past problems from Challenge
- **Contest** : Oriented towards real programming contests which use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

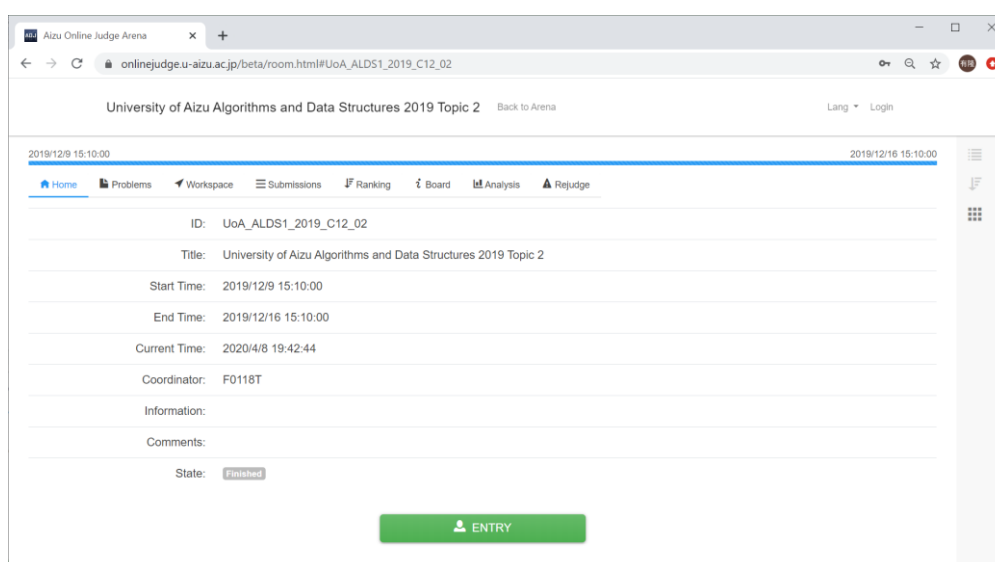


Running							
#	Title	Start	End	Coordinator	Info	Policy	State
Scheduled							
#	Title	Start	End	Coordinator	Info	Policy	State
Ended							
#	Title	Start	End	Coordinator	Info	Policy	State
UoA_ALDS1_2019_C34_13	University of Aizu Algorithms and Data Structures 2019 Topic 13	2020/1/31 13:20:00	2020/2/7 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	
UoA_ALDS1_2019_C56_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	
UoA_ALDS1_2019_C34_12	University of Aizu Algorithms and Data Structures 2019 Topic 12	2020/1/29 13:20:00	2020/2/5 13:20:00	F0118T	public	finished	
UoA_ALDS1_2019_C34_11	University of Aizu Algorithms and Data Structures 2019 Topic 11	2020/1/28 13:20:00	2020/2/4 13:20:00	F0118T	public	finished	

## 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.



University of Aizu Algorithms and Data Structures 2019 Topic 2 [Back to Arena](#) [Lang](#) [Login](#)

2019/12/9 15:10:00 2019/12/16 15:10:00

[Home](#) [Problems](#) [Workspace](#) [Submissions](#) [Ranking](#) [Board](#) [Analysis](#) [Rejudge](#)

ID: UoA\_ALDS1\_2019\_C12\_02

Title: University of Aizu Algorithms and Data Structures 2019 Topic 2

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:

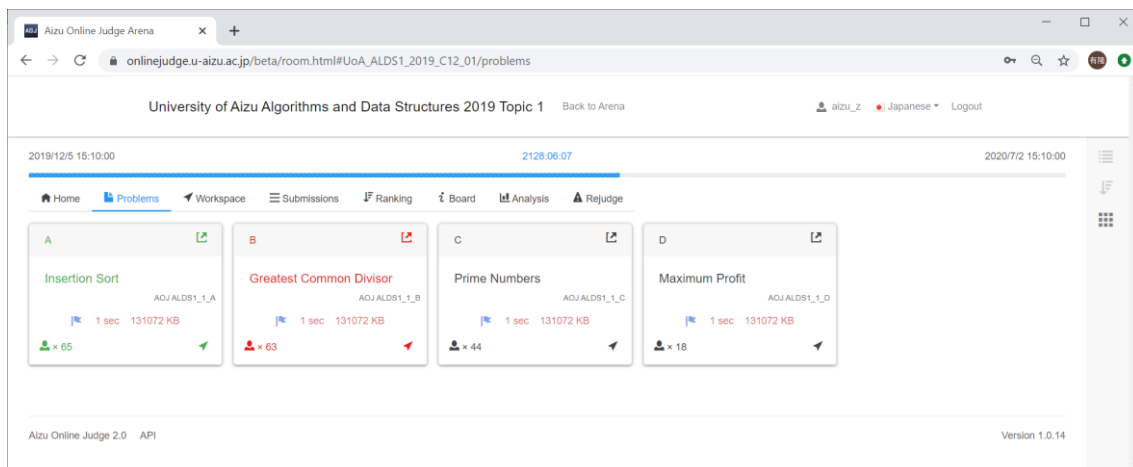
Comments:

State: Finished

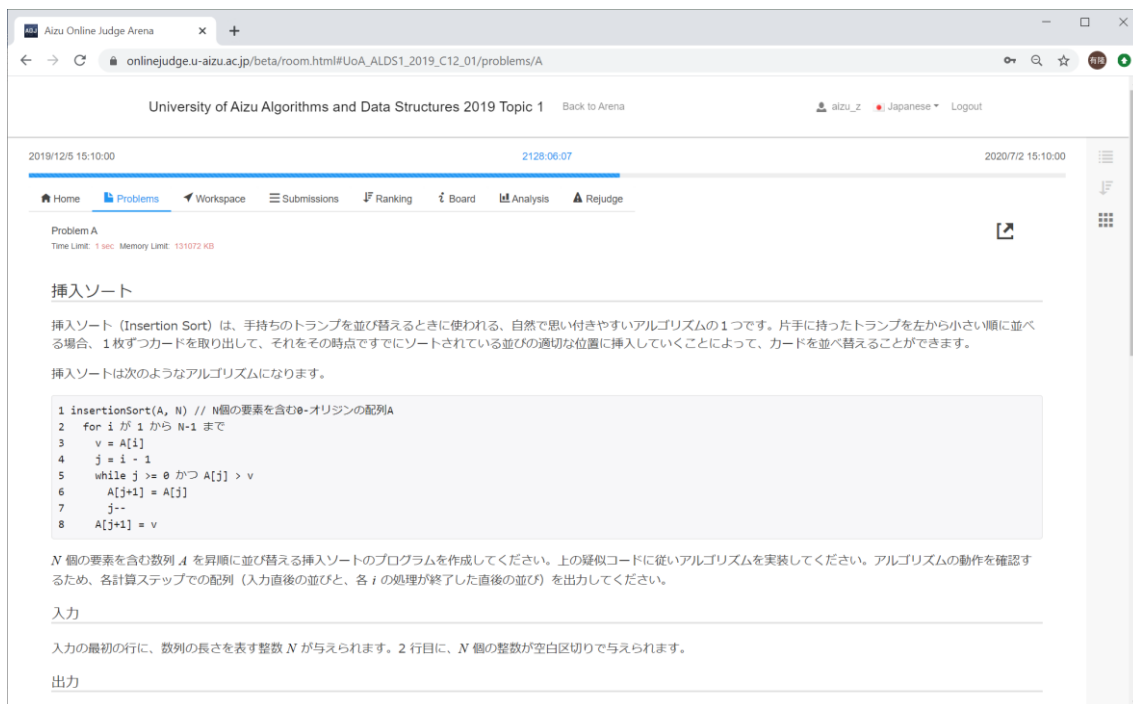
[ENTRY](#)

## Problem

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



You can click a panel (or link) to browse the problem description.



入力例 2

```
3
1 2 3
```

入力例 2 に対する出力

```
1 2 3
1 2 3
1 2 3
```

Note

[Algorithm](#)

[SUBMIT](#)

Aizu Online Judge 2.0 API Version 1.0.14

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

University of Aizu Algorithms and Data Structures 2019 Topic 1 [Back to Arena](#) aizu\_z Japanese Logout

2019/12/5 15:10:00 2128-06-07 2020/7/2 15:10:00

[Home](#) [Problems](#) [Workspace](#) [Submissions](#) [Ranking](#) [Board](#) [Analysis](#) [Rejudge](#)

Rank	User	Score	Time	A	B	C	D
69	<a href="#">aizu_z</a> University of Aizu	1	174713	121d (+1)	1		

Problem: B: Greatest Common Divisor Language: C++ [CHOOSE FILE](#) [SUBMIT](#)

[Source Code](#) [Status](#) [Submissions](#)

```

1 #include<iostream>
2 using namespace std;
3
4 static const int N = 1000;
5
6 void trace(int A[], int n){
7     for ( int i = 1; i <= n; i++ ){
8         if ( i > 1 ) cout << " ";
9         cout << A[i];
10    }
11    cout << endl;
12 }
13
14 main(){
15     int n;
16     int A[N+1];
17     cin >> n;
18     for ( int i = 1; i <= n; i++ ) cin >> A[i];
19
20     trace(A, n);
21     for ( int j = 2; j <= n; j++ ){
22         int key = A[j];

```

[USE TEXT](#)

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.

The screenshot displays the Aizu Online Judge Arena workspace. At the top, the user's profile is shown: **aizu\_z** (University of Aizu) with a score of **1** and a time of **174713**. The problem being worked on is **B: Greatest Common Divisor** in **C++**. The status is **Wrong Answer** (WA) with a score of **0/10**. The input is **54 28** and the output is **2**. The interface includes tabs for **Home**, **Problems**, **Workspace**, **Submissions**, **Ranking**, **Board**, **Analysis**, and **Rejudge**. The **Workspace** tab is active, showing the problem details and the source code area. The source code area is currently empty, and the **CHOOSE FILE** button is visible. The **SUBMIT** button is also present.

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.

## Ranking

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

University of Aizu Algorithms and Data Structures 2019 Topic 1

2019/12/5 15:10:00 2128:06:07 2020/7/2 15:10:00

Home Problems Workspace Submissions **Ranking** Board Analysis Rejudge

Rank	User	Score	Time	A	B	C	D
43	S1270031 null	3	22095	6d (+1)	96:56 (+3)	6d (+5)	
68	S1270076 C2	0	0				
67	aizu_z University of Aizu	1	174713	121d (+1)	1		
4	albusSamurai University of Aizu	4	163	00:08 (+1)	00:15 (+1)	01:09 (+2)	00:49 (+1)
3	endered THE UNIVERSITY OF AIZU	4	139	00:24 (+1)	00:27 (+1)	00:39 (+1)	00:37 (+2)
55	h738356 null	2	6027	47:38 (+9)	50:08 (+1)		
69	kinta105 null	0	0	2			
2	koni4 student	4	136	00:09 (+1)	00:10 (+1)	00:21 (+2)	00:56 (+2)
10	s1260002 null	4	6206	00:39 (+3)	01:31 (+2)	21:36 (+1)	75:39 (+10)
31	s1260021 null	3	5628	00:09 (+1)	00:10 (+1)	93:07 (+2)	

Right sidebar shows submission details for various problems (WA, AC, PE, TLE) and users (aizu\_z, h738356, s1270078, s1270056, s1270055).

## Board

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

Kyoto University Programming Contest 2020 Spring

F0118T Japanese Logout

Home Problems Workspace Submissions **Board** Analysis Rejudge

Thread List

#	Problem	Title	User	Type	Policy	Date
688			nvip62	question	public	2020/3/20 12:52:27
689	N		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ついて	kupc_official	announce	public	2020/3/20 14:38:41
693	N	与えられる入力はランダムではなく、恣意的である場合がありますか？	team_tsukukoma	question	public	2020/3/20 16:09:16

CREATE THREAD

Aizu Online Judge 2.0 API Version 1.0.14