



26th International Olympiad in Informatics

Newsletter

7 / 15 / 2014

Tasks Selections of the 2014 IOI

The task selection is a rigorous process. We sent out call-for-task to the IOI community and received more than 70 submissions from all over the world. These submissions are evaluated first by the host scientific committee (HSC) according to their originality, technical strength, and suitability for IOI. The HSC have several meetings to discuss the tasks carefully, and then recommend a short list of tasks to the international scientific committee (ISC). After studying the tasks in the short list thoroughly, the ISC has a final meeting to select six problems for the contest, and three problems for backup. The ISC will examine the tasks in all aspects, including algorithmic innovation, possible complexity in different solutions, and how to assist the contestants to approach the problem with different level of difficulties required. It is a challenging but interesting process.

As the chair of the HSC and a member of ISC, I personally learned a great deal in this task selection process, especially from

my colleagues in HSC and ISC. They all seek perfection in their work, and innovation in their thoughts.



Dr. Liu (center) is concerned on how the contest goes.

(Photography: Jia-Neng Ong)

Practice Session

LOCK AND LOADED!

Contestants from 82 countries are now test-driving their "weapon" for victory! Trying out with the machines that Acer provided, network from Cisco and Chunghwa Telecom, and stable electricity from Schneider Electric, the contestants have only 2 hours to get familiar with everything. On the other side, the online judge server is accepting practice tasks sent from all 316 contestants. The question is "Are you prepared?" Let us wait and see how the contestant will end up with in the following day contest.



Contestants test drive their machines for the 2014 IOI.

(Photography: Chao-ping Yang and Jain-Wei Sun)



7/15

Weather Report

AM ☁ 28~36°C

PM ☁ 28~32°C

Excursion

Gold Ecological Park

The Gold Ecological Park is Taiwan's first museum planned as an eco-museum. The aim being to combine community power and completely preserve the precious natural resources, mining relics, landscape, historical memories and cultural property of Jinguashi, attempting to give them a new life. The various facilities and buildings of the park display Jinguashi's various resources using a catalogue method, aiming to guide visitors into the environment and allow them to experience the rich resources in the environment. Planning of the park began in 2002. It was formally opened on November 4, 2004.

The "Gold Building" is the renovated former offices of the Taiwan Metal Mining Corp. The first floor has a gold discovery journey, a model of the Benshan tunnels, displays on the subject of the mining transport system in Jinguashi, and mining equipment from the past and related relics. There is also an introduction to Jinguashi's World War II Allied P.O.W. camp (1942-1945). The second floor is gold-themed and has an introduction of the special features and application of gold, gold craftworks and a Gold brick that visitors can actually touch. In addition, visitors also can have a gold panning experience on the third floor. The gift shop at the side of the Gold Building sells Gold Museum souvenirs and is a good place to browse and buy a souvenir

A special tour for visitors involves in walking into the tunnel to discover the mystery of gold mining. The Gold Museum renovated the old Benshan No.5 Tunnel to allow visitors to have a real experience of a mining tunnel and to understand the environment in which miners worked. Part of the tunnel is open to the public as tunnel experience area and plastic models are used to show how the miners worked in years gone by.



8th IOI Conference Agenda

July 15, 2014

Time	Presenter	Topic
09:00 - 09:15		Opening
09:15 - 09:30	David GINAT	On Inductive Progress in Algorithmic Problem Solving
09:30 - 09:45	Jakub RADOSZEWSKI	More Algorithms without Programming
09:45 - 10:00	Sebastien COMBEFIS, Jeremy WAULETEL	Programming Trainings and Informatics Teaching Through Online Contests
10:00 - 10:30	Luis Hector CHAVEZ, Alan GONZALEZ, & Joemmanuel PONCE	omegaUp: Cloud-Based Contest Management System and Training Platform in the Mexican Olympiad in Informatics
10:30 - 11:00	Marija MIHOVA, Natasha STOJKOVIKJ, Mile JOVANOV, & Emil STANKOV	On Maximal Level Minimal Path Vectors of a Two-Terminal Network
11:00 - 11:30		Coffee Break
11:30 - 11:45	Stefano MAGGILOLO, Giovanni MASCELLANI, & Luca WEHRSTEDT	CMS: a Growing Grading System
11:45 - 12:00	Jordan FERNANDO, Inggriani LIEM	Components and Architectural Design of an Autograder System Family
12:00 - 12:15	Yugo K. ISAL, Inggriani LIEM, Adi MULYANTO, & Brian MARSHAL	Indonesian Olympiad in Informatics: Significant Advancements between 2010 and 2014
12:15 - 12:45	Vladimir M. KIRYUKHIN, Marina S. TSVETKOVA	The Approach of Early Olympiad Preparation "Olympic Lift"

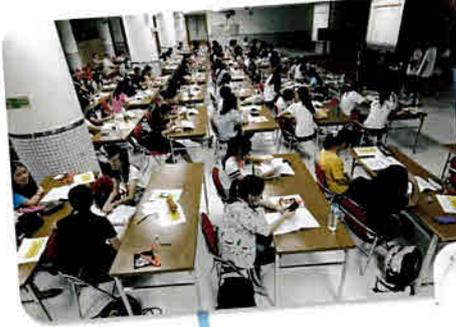
Day 3: Tuesday 15 July 2014

Time	Contestants	Leaders	Guests
06:30-07:00	Breakfast Fullon Lotus Banquet Hall	Breakfast Hyatt Café	
07:00-08:00			
08:00-09:00	Transfer to TICC		
09:00-10:00	Contest Day 1 TICC 101/201	Q/A and IOI Conference 1 (10:00-13:00) Hyatt Grand Ballroom II	Excursion 3 Gold Ecological Park
10:00-11:00			
11:00-12:00			
12:00-13:00			
13:00-14:00			
14:00-15:00	Lunch TICC Banquet Hall		Jiufen old Town
15:00-16:00	Result & Analysis TICC 101/201		
16:00-17:00		GA 5 TICC 102	Free Time
17:00-18:00	Free Time		
18:00-19:00	Mayor's Dinner TICC Banquet Hall		
19:00-20:00			
20:00-21:00	Transfer to Fullon	Free Time	Free Time
21:00-22:00	Free Time		

Volunteer training and preparation

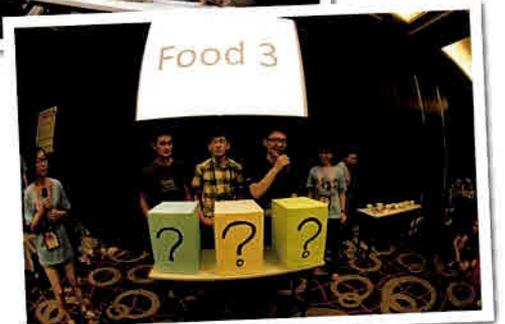
Student and teachers volunteers, these warm hearted people sacrificed their vacation to help the 2014 IOI run smoothly. Just before the arrival of teams all over the world, they went under a three day intense course on how to take care of the contestants. They will serve as a guide, a communication window, and a friend. First of all, they will learn how to evacuate in case of fire, earthquake, or flood. After all, safety first! Then they will learn how to guide their team to reach designated areas, including the contest grounds, excursion sites, and hotel accommodations. Finally, they have all been trained with international etiquette and will prepare talent shows to entertain us. Please look forward to see what they have in their pockets!

(All photo by Jian-Wei Sun and Chao-Ping Yang)



Volunteers working like Christmas elves packing surprises into IOI backpacks.

TALENT SHOW and Games

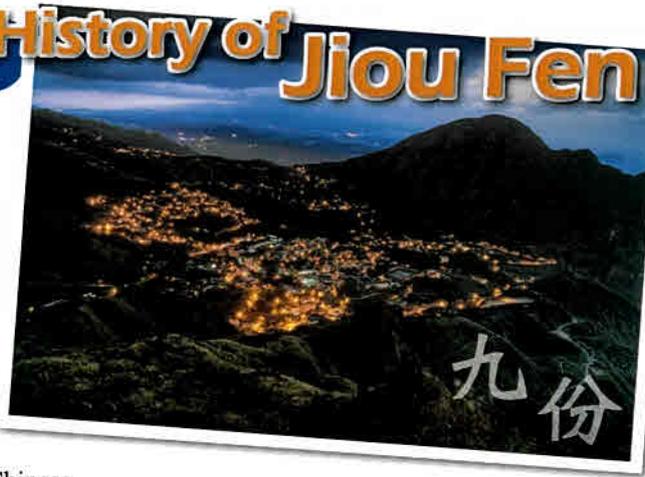


(Photography: Jian-Wei Sun, Chao-Ping Yang, and Dickson Angsan Ng,)

Excursion

History of Jiou Fen

Legend says that in the beginning there were only 9 households living there. Since land routes were not established yet, all necessities must be delivered by sea routes. Thus whatever purchased must be split into "9 portions", which is what Jiou Fen means in Chinese.



Around 1890, gold was discovered at Jinguashi (金瓜石). The gold rush led the poor and isolated village of Jiou Fen flourishing. An estimate of three to four thousand households came and settled during that period.

During the Japanese era, a great amount of gold was exported to Japan, bringing the mining industry to its peak. Moreover, due to the price of gold increased in 1930s, Jiou Fen became the "Asia gold city". This prosperity has led to nicknames for Jiou Fen such as "Little Hong Kong" and "Little Shang Hai".

Following the Japanese came the Republic of China government. The lack of

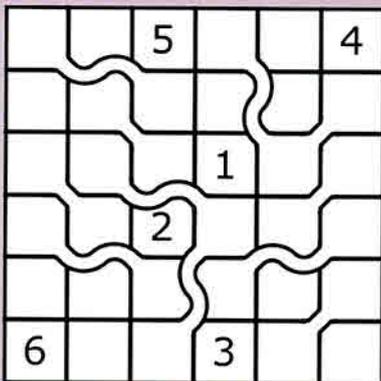
management and the depletion of gold mines made the mining industry non-profitable. Jiou Fen as a result, went into the history.

The movie "A City of Sadness" directed by Hou Hsiao-Hsien and filmed in Jiou Fen, was the first Taiwanese film to win the Golden Lion award (Leone d'oro) at the Venice Film Festival (Mostra Internazionale d'Arte Cinematografica di Venezia). This film brought public attention to Jiou Fen. The old streets and abandoned mines advertised and reported by the media attracted artists in search of inspirations and tourists in search of history. This is the Jiou Fen you see today.

Game

Can you complete the grid such that every row and column contains the digits 1 to 6.

All squares that are connected contain the same digit.



Answer of 07/14:

As this is a very difficult puzzle, I thought it would help if I asked a simple question: What is one plus one?

Sponsor



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Taiwan Trivia

★ How big is Taiwan?

Taiwan is about the same size as Switzerland or Belgium. Its total area is 35,801 square km.

★ Why is it also called Formosa?

"Ihla Formosa" is how the Portuguese explorers called the island 500 years ago when they first saw it from their vessels. It means "Beautiful Island".

★ What is the population of Taiwan?

Taiwan's population is about 23 million people. It is the fifteenth most densely populated country in the world. It is crowded indeed in some of the big cities. Want to know more about the population of Taiwan?

★ What is Taiwan's currency?

The country's currency is called the New Taiwan Dollar (NTD or NT\$). In Chinese it's commonly called yuán or kuài. Taiwanese money comes in the following denominations:

Coins: 1, 5, 10, and 50NT\$. Notes: 100, 500, and 1000NT\$.

★ What language do Taiwanese people speak?

Mandarin Chinese is the official language on the island and is spoken by most people. Taiwanese, a Chinese dialect from Fujian Province in China, is spoken by 70% of the population. Also, due to 50 years of Japanese rule, lots of people born before 1940 are still fluent in Japanese.

★ How is Taiwan's Geography?

2/3 of the island is covered with the densely forested Central Mountain Chain. The majority of the population lives in busy metropolitan areas on plains, and basins on the western part of the island.

★ What is Taiwan's highest mountain?

Imposing Mt. Jade (Yushan) is the highest mountain in Taiwan at 3952m. It's in the central part of the island. With 240 peaks that reach above 3000 meters.

★ What's life in Taiwan like for a westerner?

Life in Taiwan is amazing for a westerner! It's somewhat easy to get a decent teaching job, and the locals are super friendly. The possibilities for adventure, travel and cultural exploration are endless on this "little" island.

★ Are Taiwanese people friendly?

Taiwanese people are exceptionally pleasant and hospitable with westerners. It's in their nature to go out of their way to help foreigners.