Get started, win great prices and qualify for the International Olympiad in Informatics in Australia!

Deadline 30. November 2012

22nd Swiss Olympiad in Informatics

www.soi.ch

SWISS OLYMPIAD IN INFORMATICS

ETH Eidgenössische Technische Hochschule Zürich Swiss Federal Institute of Technology Zurich

Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
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Eidgenössisches Departement des Innern EDI
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Schweizer Informatik Gesellschaft
Société Suisse d'Informatique
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Swiss Informatics Society

Roche

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What is the SOI?

The Swiss Olympiad in Informatics is a programming contest for young people under 20 years of age, which are enrolled at a Swiss school for secondary education ('Gymnasium', 'Sekundarschule', 'Berufsschule', etc.). Since 1992, the competition has been offering computer enthusiasts a platform to match their skills with others who share their interest.

What is the first round like?

The SOI involves three rounds. In the first round you have time until the 11/30/2012 to solve the tasks. The tasks consist of three practical, two theoretical and one creativity task. For the practical tasks you can choose any programming language you like.

What is the Creativity Task?

The Creativity Task is a tournament task that requires creative insight and is not expected to be solved optimally. All submissions for the Creativity Task will go head to head on the SOI day, which takes place in mid-January.

What is the Davos Camp?

The twelve best performing participants of the first round will qualify for an all-inclusive trainingsweek in Davos.

What is the IOI?

It is the world championship in programming. Each year around 300 participants from about 80 different countries compete against each other to win gold, silver or bronze medals. Every country can send four participants and in Summer 2013 it will take place in Australia. Everything will be paid by the SOI.

SAMPLE TASKS

A Huge "L"

You are given a rectangle of size *M*x*N*, which is filled with zeroes and ones. Mouse Stofl would like to find the largest "L" in that rectangle, which is formed by three equally large squares. Could you determine for Mouse Stofl the area of the largest "L"?

Sample Input
4 5
01110
11101
11111
01111
Solution: 12

Bookshelf

Mouse Stofl has a bookshelf of width *B*. Each of his *n* books have width b_i and cost v_i (value). Can you choose a subset of books, such that they fit into the bookshelf and their total value is maximized.

Get started on **www.soi.ch**