Scale

With a balance you can compare the weight of two objects. How often do you need to measure to find the lightest of n objects?

a) n·n   b) n
c) n-1   d) n/2

Symmetric numbers

We call a number symmetric if it is the same read from front to back and from back to front. For example 12321 is a symmetric number, 123 is not.

Q1) How many symmetric two-digit numbers are there?
Q2) How many symmetric three-digit numbers are there?

Implement: Given a number, find the next bigger number that is symmetric. For example if you are given 864, output 868. Given 868, output 878.

Algorithm

Which numbers does the following algorithm print?

```
1: X = 1
2: X = X + 2
3: PRINT X
4: X = X - 1
5: IF X ≠ 6 GOTO 2
6: END
```

These and more tasks on
intro.soi.ch

How to participate:

1. Sign up on soi.ch
2. Solve the First Round online between 1.9–26.9 2025 (late participation possible)
3. Solve the tasks from the Pre-Round and learn basic programming
4. Come to our workshops to learn everything needed for the Second Round
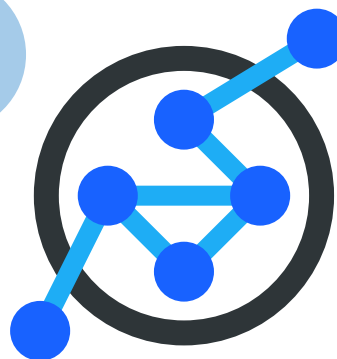
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Programmierwettbewerb für Jugendliche
Concours de programmation pour jeunes
Gara di programmazione per giovani

Swiss Olympiad in Informatics — how does it work?

For most tasks, you have to compute certain information based on input data. But rather than doing it yourself, you write a program which finds the answer for you. This can be quite tricky. Don't worry – you don't have be able to code already.
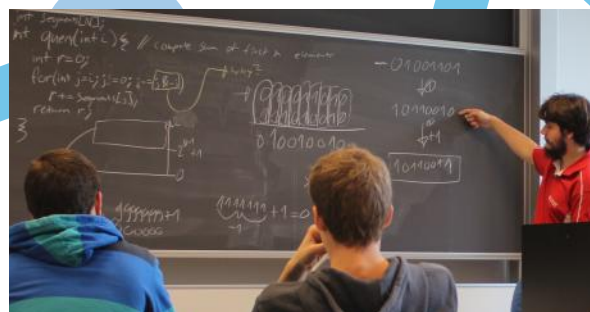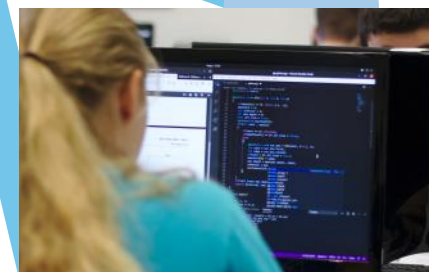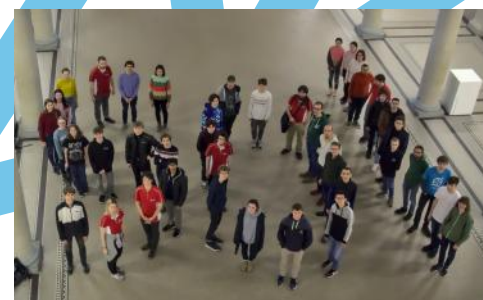
How do I participate?

The First Round takes place on soi.ch from 1.9–26.9. You can also solve the Pre-Round and attend our algorithm workshops to get an introduction to competitive programming. More info and registration on soi.ch.

Learn more:
soi.ch

Who is it for?

We recommend participation for students aged 12 and above. You're eligible if you're attending a Swiss school and are under 20 years old.

Partners

You may also be interested in our associated Olympiads in Astronomy, Biology, Chemistry, Economics, Geography, Linguistics, Mathematics, Philosophy, Physics and Robotics.

Pre-Round

The Pre-Round is a warm-up for the second and subsequent rounds. It consists of easy problems which can be solved online. The Pre-Round is suitable as an introduction to coding — you learn a little more coding with every problem.

First Round

The First Round is a 40-minute online quiz with multiple-choice computer science questions. No prior knowledge is required, just sharp logical thinking. The First Round is ideal for solving in class; you are invited to ask your teacher about it. It runs from **1.9–26.9**. Don't panic if you missed the official window — check the website for options for taking the test late.

Workshops

During the Second Round, we offer workshops that teach the basics of competitive programming. They take place in **October**, in both **Lausanne** and **Zürich**. To attend a workshop, you need to have solved some tasks in the Pre-Round. Participation is highly recommended — the workshops are not only educational but also great social events.

Second Round

In the Second Round you have 2 months to solve 5 challenging coding problems. You can submit your programs online and get instant feedback on their correctness. The Second Round runs from **1.10–30.11**. The Round is divided into two age categories: **Junior** and **Regular**. The best participants from both categories qualify for the SOI Finals and are invited to the SOI-Camp.

SOI-Camp

In the Second Round, 24 participants qualify for a training camp held in **February**. At the camp, there are plenty of interesting lessons, mock contests and a fun programme of activities.

Finals

The top 24 from the Second Round demonstrate their skills in two contests, each lasting 5 hours. The results will be announced at the Medal Ceremony, a one-day event with an exciting program at EPFL.

«The SOI offers the opportunity to meet like-minded people from all over Switzerland at various camps and workshops. Exciting concepts can be learnt and challenging problems solved. During the breaks and in the evenings, games are often played, which provides a good balance to the programming.»

Hannah Oss, SOI-Participant 2024

Team-Selection

On two weekends in May with the best 12 finalists, we determine the delegations for the IOI, CEOI, WEOI, RMI and training camps at home and abroad in four 5-hour contests.

European Girls' Olympiad in Informatics

The best four female participants in the Finals will represent Switzerland at the EGOI and meet girls from all over Europe who share an interest in computer science.

«The SOI is a great way to improve your problem-solving skills. At the same time, you get to know new people who are generally helpful and passionate, creating an ideal environment to learn a lot. But SOI is also entertaining outside of programming. The people have a sense of humour and there are always a few who are up for a game.»

Lionel Müller, SOI-Participant 2024

International Olympiad in Informatics

Over 80 nations send their best 4 participants to the International Olympiad in Informatics (IOI). The IOI is the most important, but not the only international competition where the best SOI participants can compete and exchange ideas with other young people. The IOI 2026 will take place in **Uzbekistan**.