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

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
```

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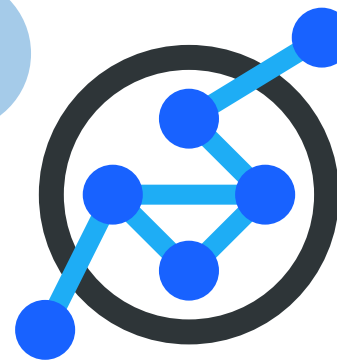
Q1) How many symmetric two-digit numbers are there?
Q2) How many symmetric three-digit numbers are there?

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.

These and more tasks on
intro.soi.ch

How to participate:

1. Sign up on soi.ch
2. Solve the tasks from the Pre-Round and learn basic programming
3. Come to our workshops to learn everything needed for the Qualification Round
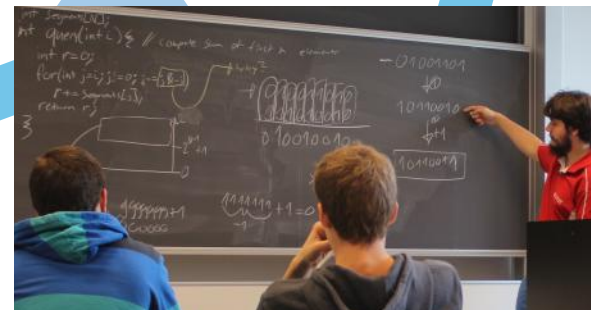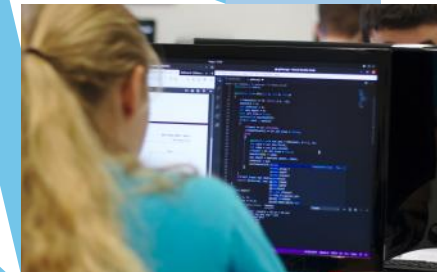4. Solve the Qualification Round between September 15 and November 30 2024

Partners

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

INFORMATICS.OLYMPIAD.CH

INFORMATIK-OLYMPIADE
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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.
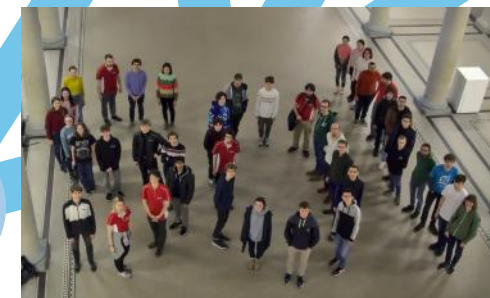
How do I participate?

The qualification round will take place on soi.ch from 15.9 - 30.11. In preparation for beginners, there will be an online preliminary round as well as algorithm workshops. More info and registration on soi.ch.

Learn more:
soi.ch

Who is it for?

We recommend starting to participate at around 12 years. You're eligible as long as you're attending a Swiss school and are below 20 years.

Pre-Round

The Pre-Round is a warm-up for the Qualification Round. It consists of a few 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.

Workshops

The workshops during the Qualification Round teach the basics of competitive programming. Participation in the workshops is ideal if you have already programmed a little, for example in the Pre-Round.

Qualification Round

The Qualification Round also takes place online. Send in your solutions from **September 15 - November 30**. You have 2½ months to solve 6 tricky tasks. The Qualification 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.

What is the SOI-Camp?

24 participants qualify in the Qualification Round for a training camp in February. At the camp, there are plenty of exciting lessons, mock contests and a fun programme of activities.

Finals

The top 24 from the Qualification 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 programme at ETH.

«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 2023

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 2023

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 2025 will take place in **Bolivia**.