Freshmen Programming Contests 2026

Solutions presentation

By the Freshmen Programming Contests 2026 jury for:

- AAPJE in Amsterdam
- FPC in Delft
- FPC in Eindhoven
- GAPC in Groningen
- Contest in Mons

April 25, 2026

Please do not post the problems online

Other universities will have their contests in the coming weeks.

Please, do not post/discuss the problems online before

Saturday 9 May 2026 at 17:00

A: Animal Attire

Problem author: Leon van der Waal

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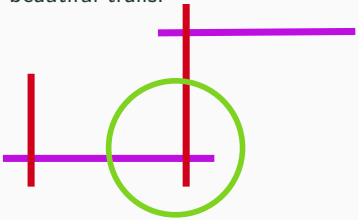

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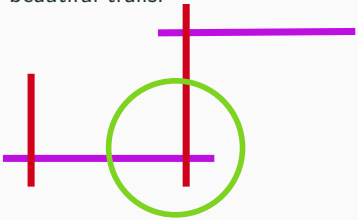

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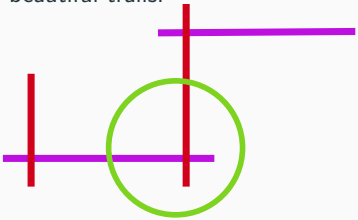

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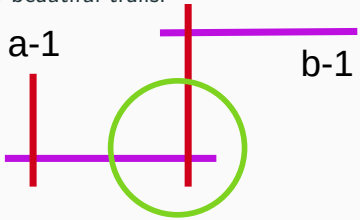

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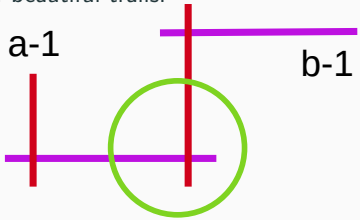

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- **Complexity:** $\mathcal{O}(n)$ per intersection, so $\mathcal{O}\left(n^3\right)$ in total. Still too slow.

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- **Bonus:** It is possible to solve this problem in $\mathcal{O}\left(n \log(n)\right)$ using fenwick tree + sweepline.

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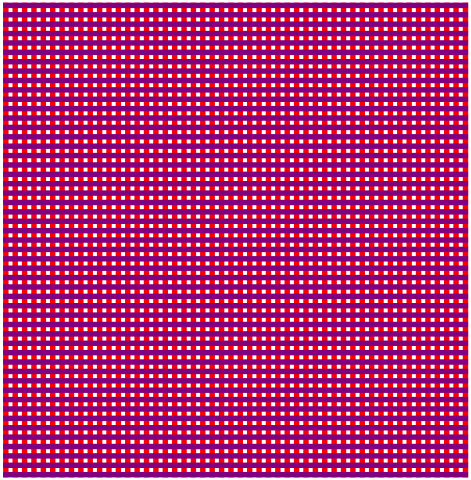

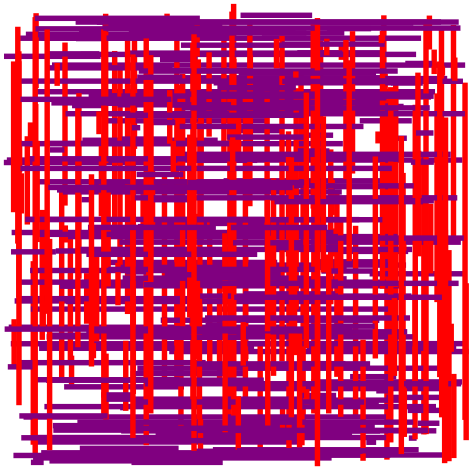

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K: Kracked Enkoder

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- **Solution 2:** Treat the initial '1' as implicit (we do not need to encode 0).
  For example, encode 42 as "01010". When decoding, prepend the implicit '1' again.
  (This is also how the mantissa of IEEE-754 floating-point numbers are encoded.)

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L: Labyrinth Obstacle Layout

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Random facts

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- The minimum[1] number of lines the jury needed to solve all problems is

$$?+?+?+?+?+?+?+?+?+?+?+? = ??$$

  On average ?.? lines per problem, up from 3.5 last year

[1] *After* codegolfing

Thanks to the proofreaders:

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- Wietze Koops (Lund Uni.../...versity of Copenhagen, 🎈)

🎈 = solved most problems

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- Leon van der Waal (TU Delft)
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- Maarten Sijm (TU Delft)
- Mattia Marziali (RU Groningen)
- Rares Rauta (TU Eindhoven)

UMONS
Université de Mons

Open online contest

Want to solve the problems you could not finish?
Or have friends that like to solve algorithmic problems?

`https://fpcs2026.bapc.eu/`

Saturday 9 May 2026 13:00–17:00

Please, do not post/discuss the problems online before this time!

Excited to participate in the next contest?

Register for the BAPC Preliminaries in September!

Want to organize these contests?

Join the organizing committee!

Want to create programming problems for FPCs next year?

Either join the committee, or contact Maarten Sijm