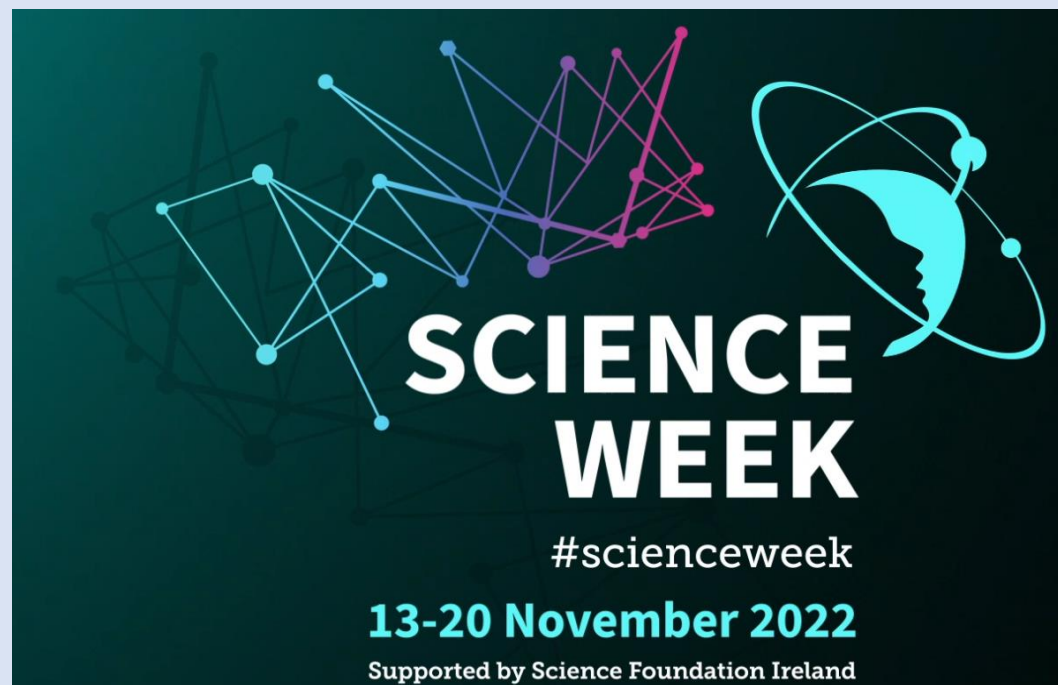




Computational Thinking Tasks for Science Week 2022



PACT team
Department of Computer Science
Maynooth University, Ireland



<https://pact.cs.nuim.ie>

Computational Thinking (CT)

- CT is a set of problem-solving skills that computer scientists use when they do their everyday work
- CT intersects with STEM fields: computational solutions are useful and needed in all scientific fields

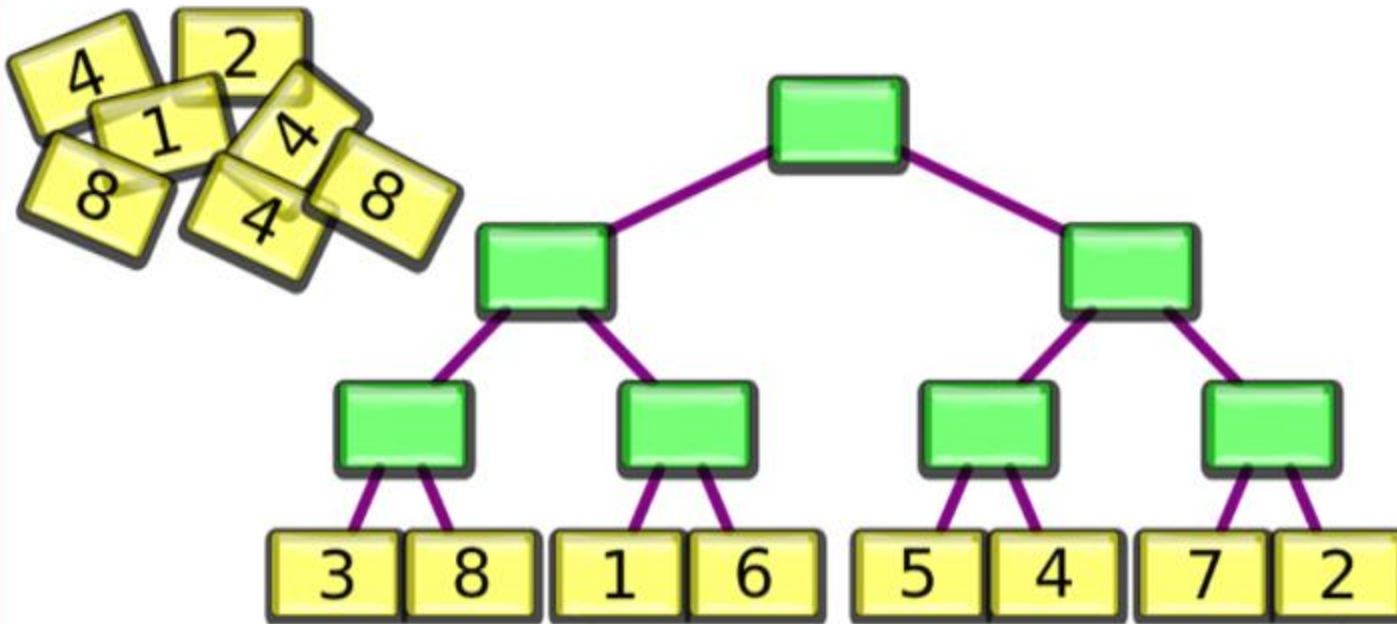




Beaver tournament



Krešo watched a tournament of races. Eight runners started. In each race there were two runners, and the winner went forward to the next race. Each runner wore the same number throughout the tournament. Krešo used numbered cards to represent each runner, and recorded the winners on the board below.



When the tournament was over, his younger brother Tomo took seven cards off the board.





Beaver tournament



QUESTION:

Who won the tournament?

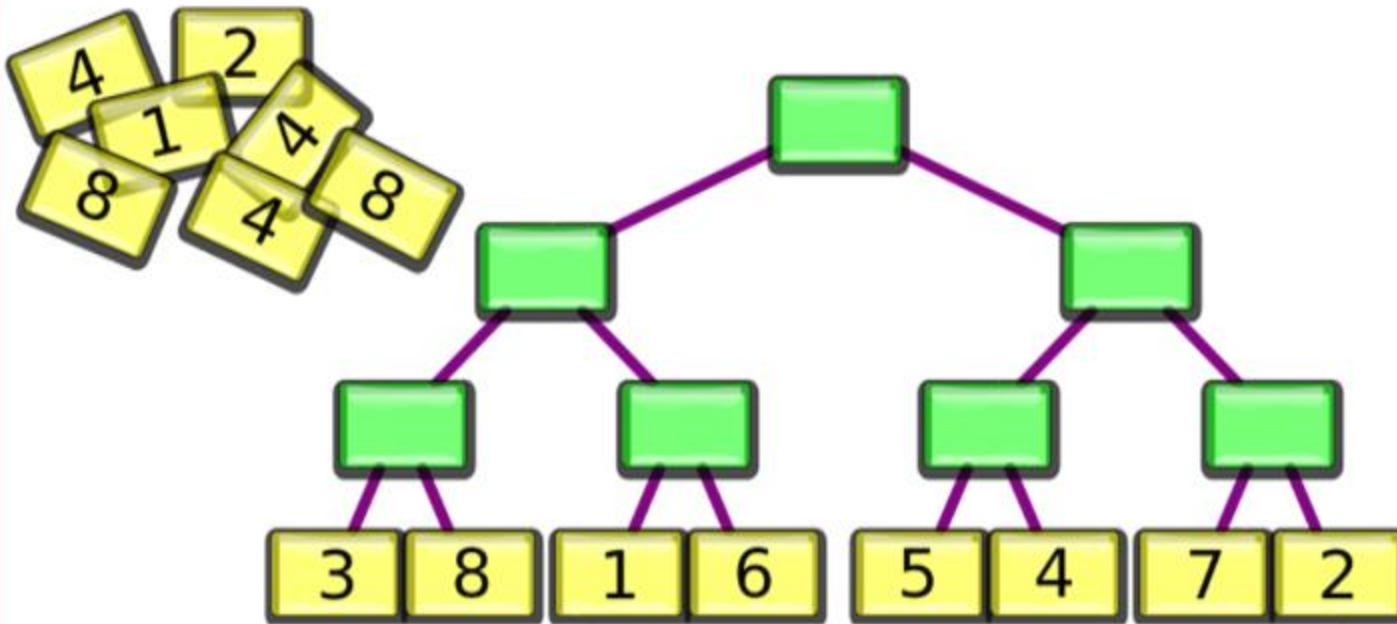
A. Runner 1

B. Runner 2

C. Runner 4

D. Runner 8

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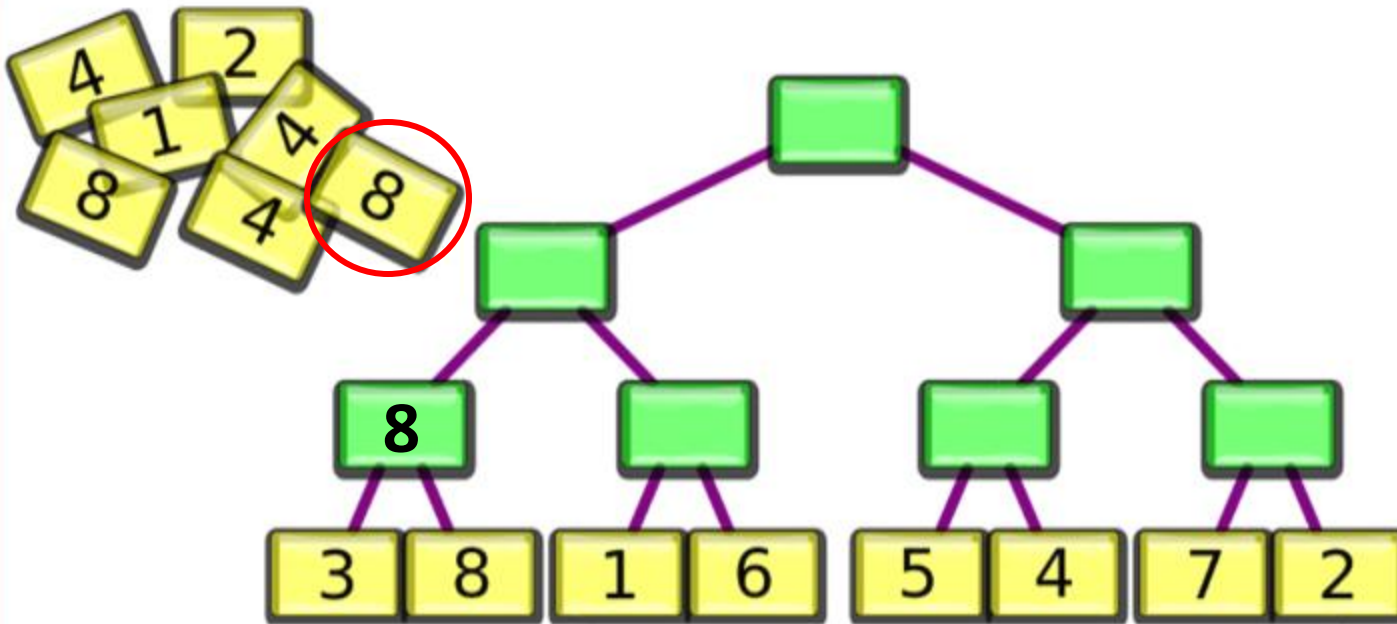
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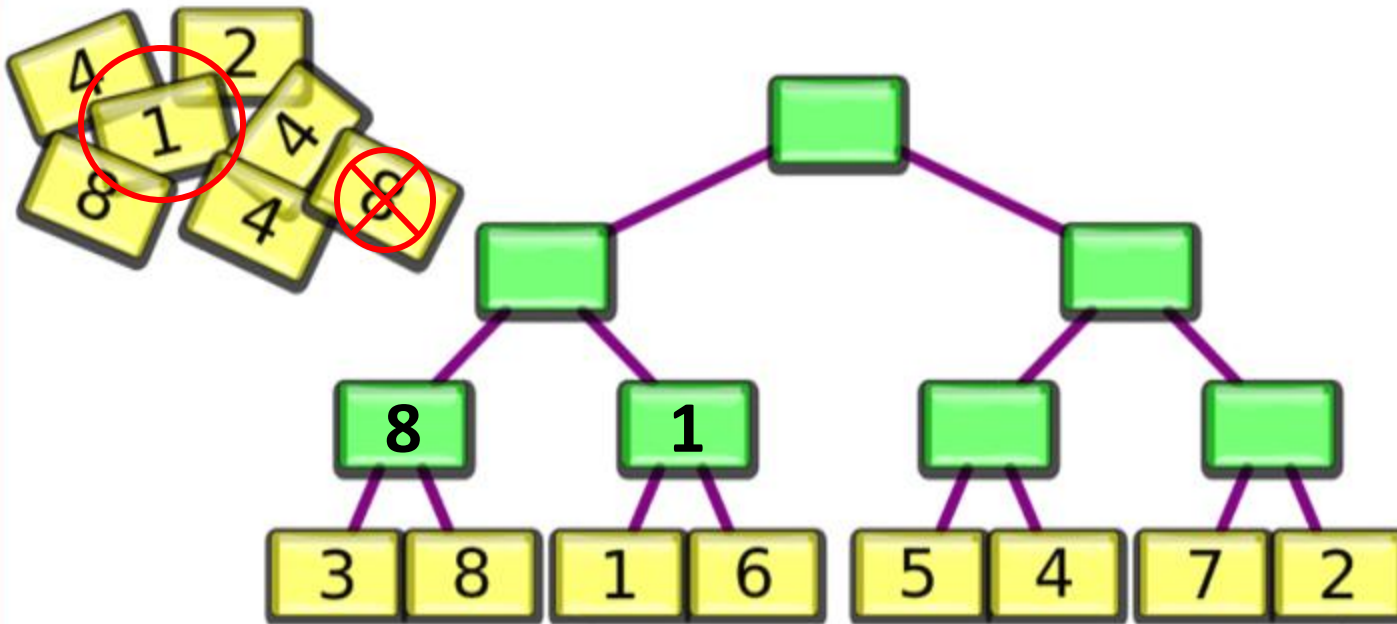
A. Runner 1

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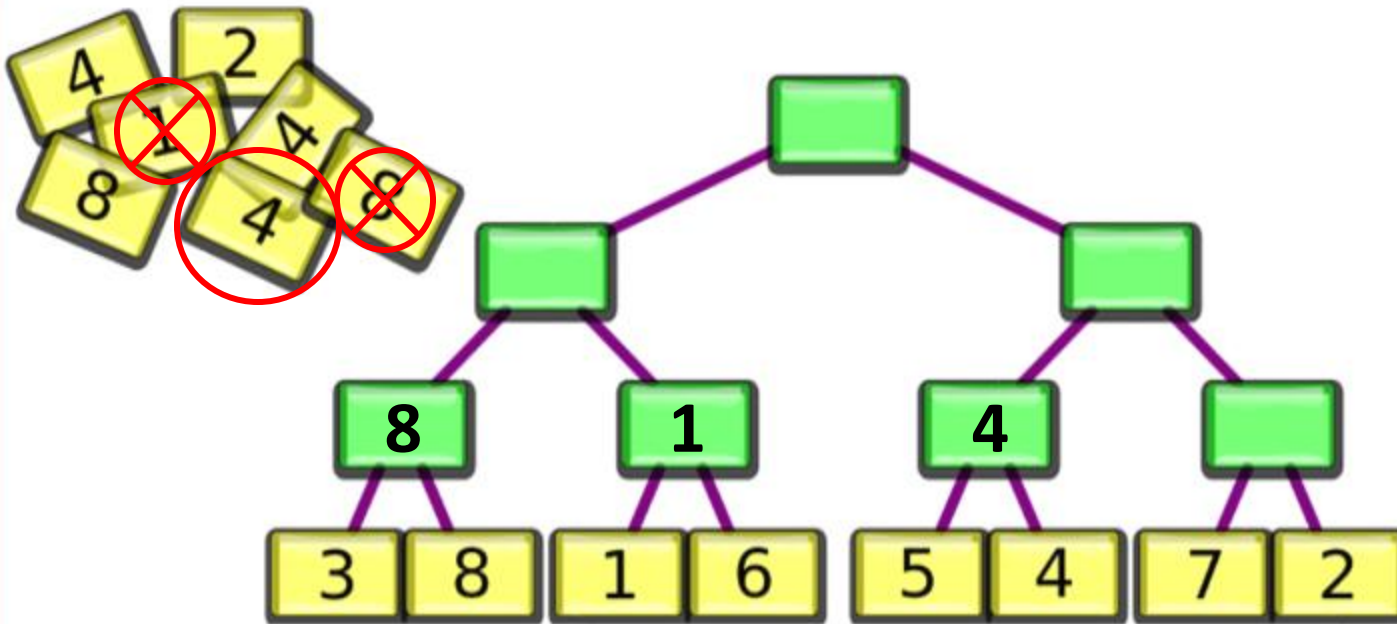
Beaver tournament



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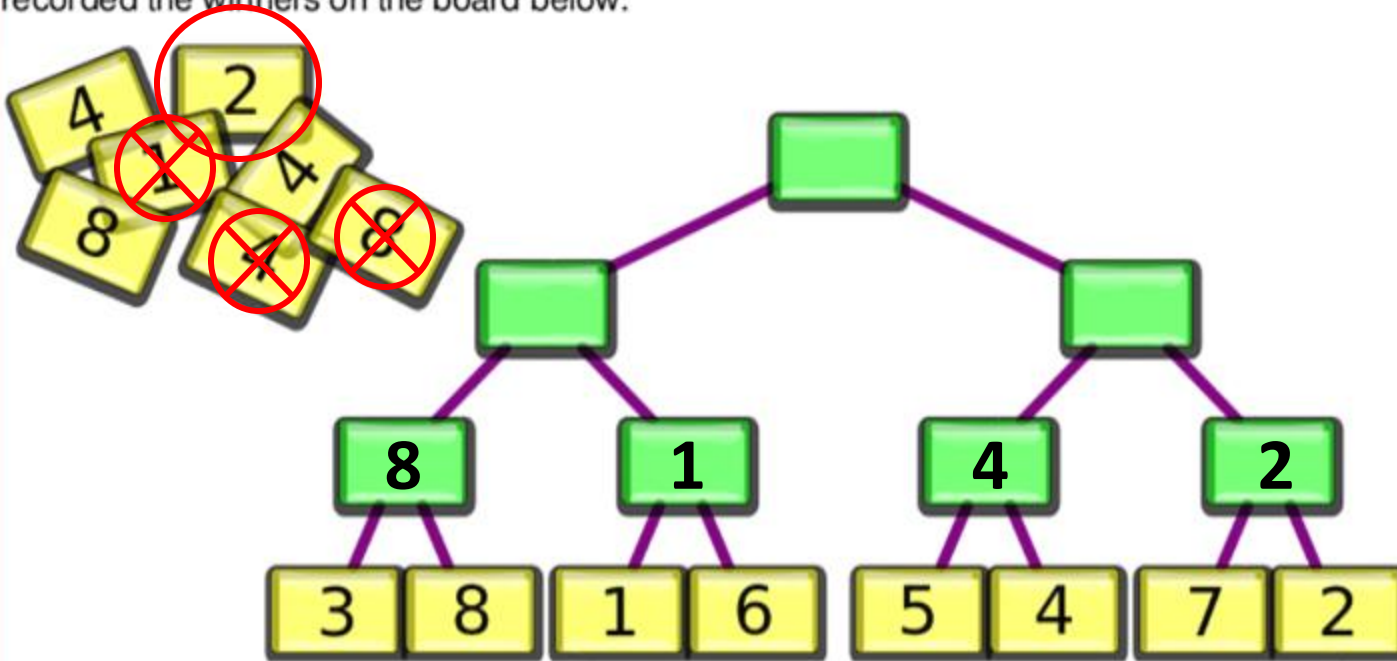
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B. Runner 2

C. Runner 4

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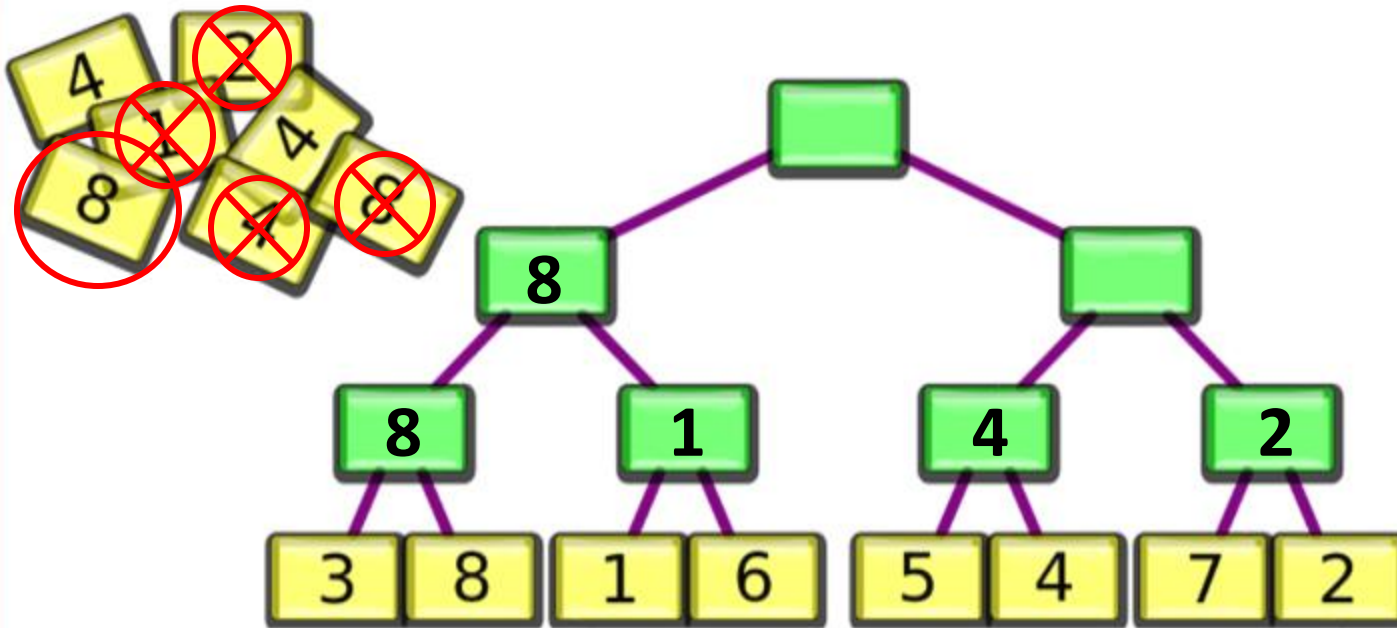
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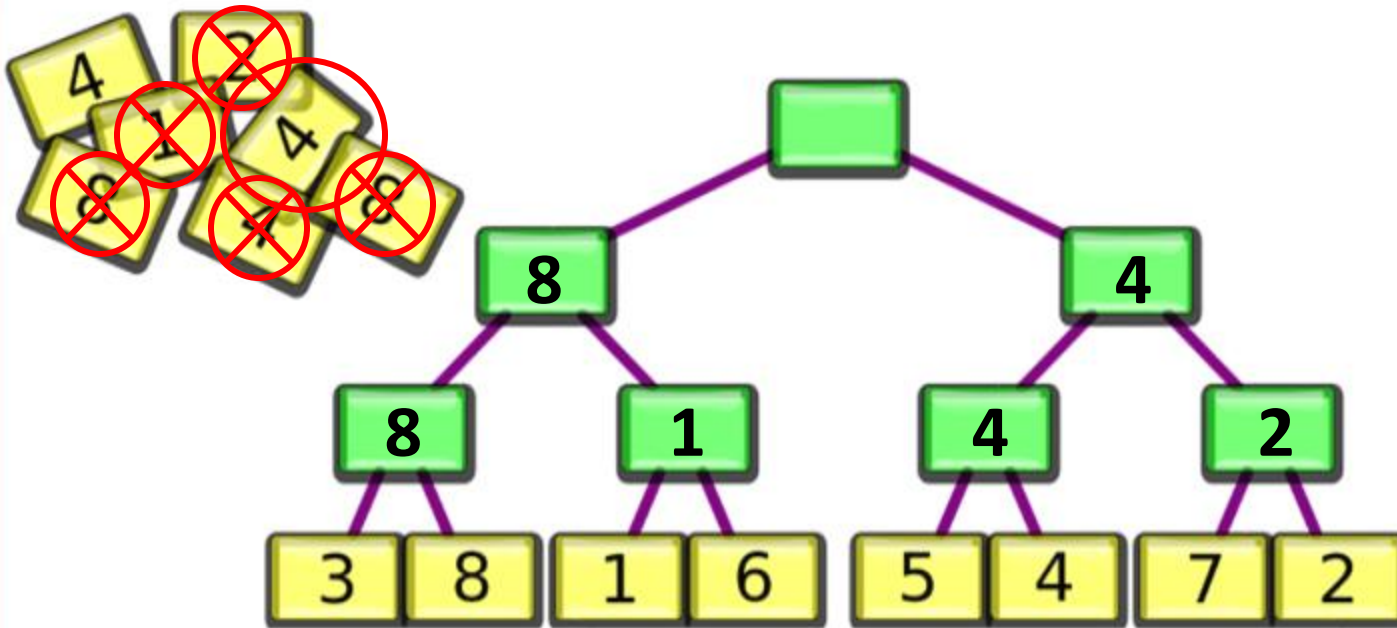
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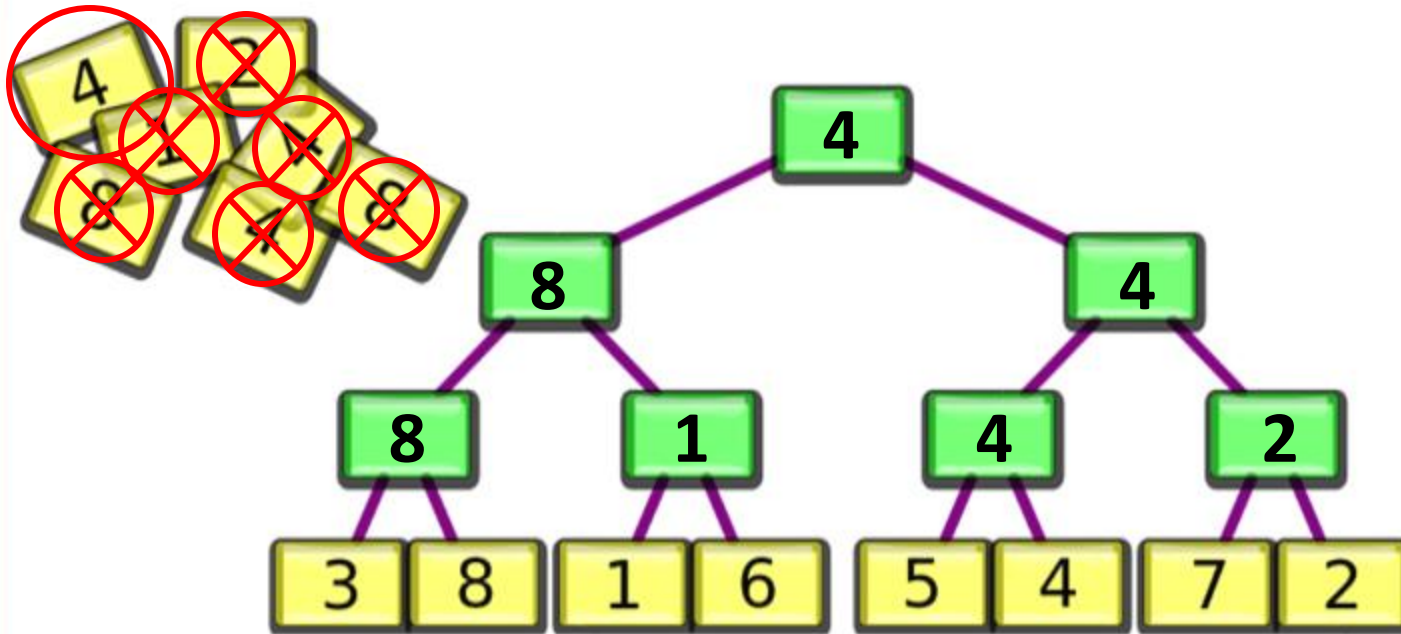
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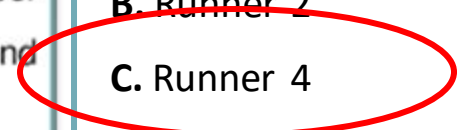
Who won the tournament?

A. Runner 1

B. Runner 2

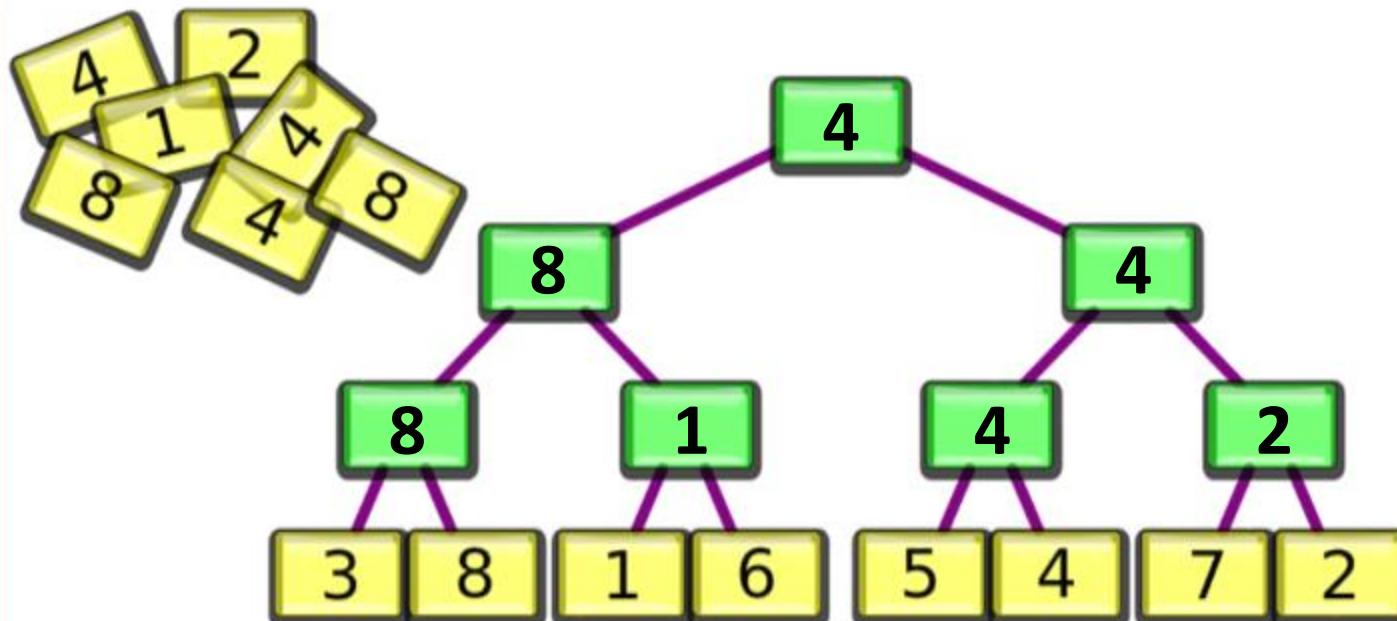
C. Runner 4

D. Runner 8



This task is an example of computational thinking topic **abstraction**. From the limited information we had about the number cards, we could solve who won the race.

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Questions / comments / discussion

See our website for more computational thinking tasks:

<https://pact.cs.nuim.ie>

Email: pact@mu.ie

To sign up for the Bebras Challenge
(taking place 7-25th November 2022):

<https://bebras.techweek.ie>