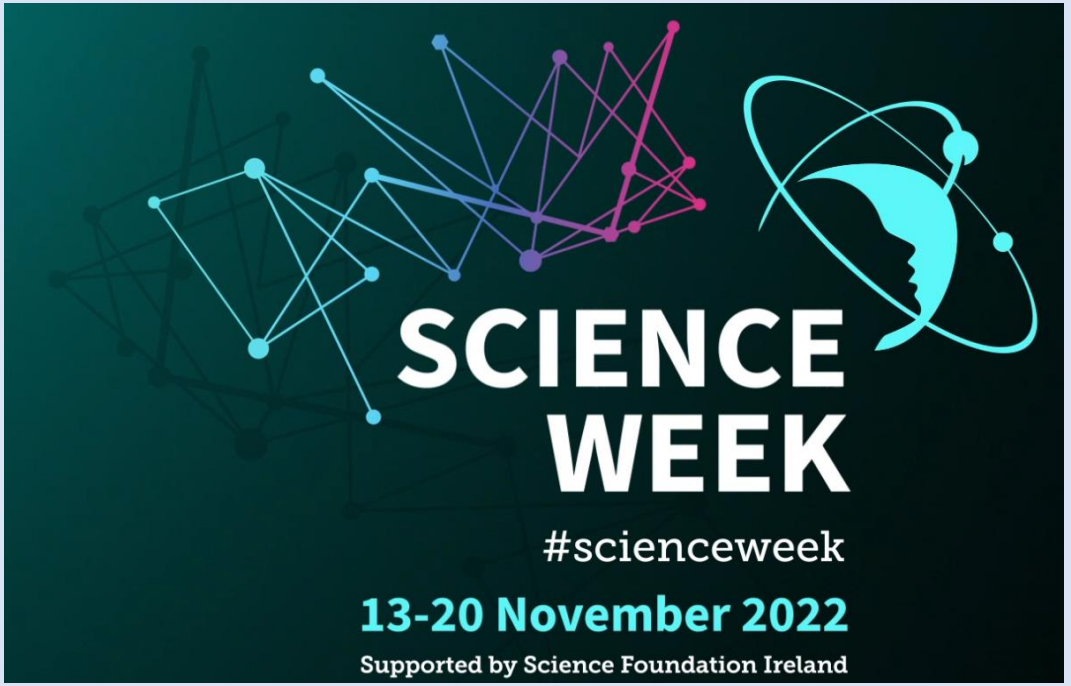
Computational Thinking Tasks for Science Week 2022

PACT team
Department of Computer Science
Maynooth University, Ireland



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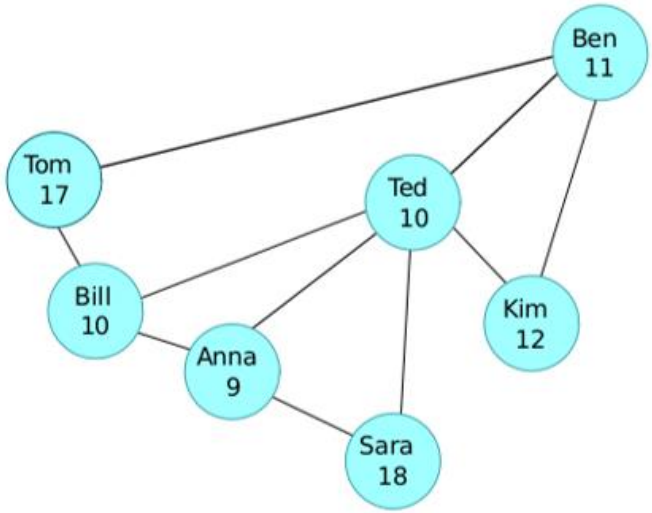
Book sharing club

This diagram shows who is friends with whom in a book-sharing club. Their names and ages are also shown.



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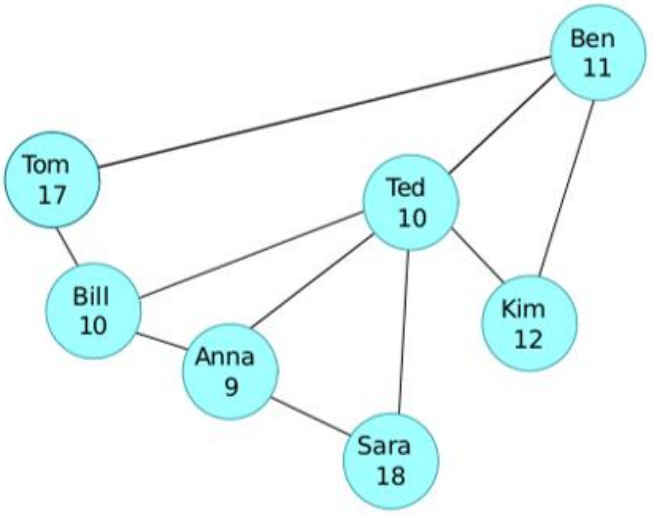

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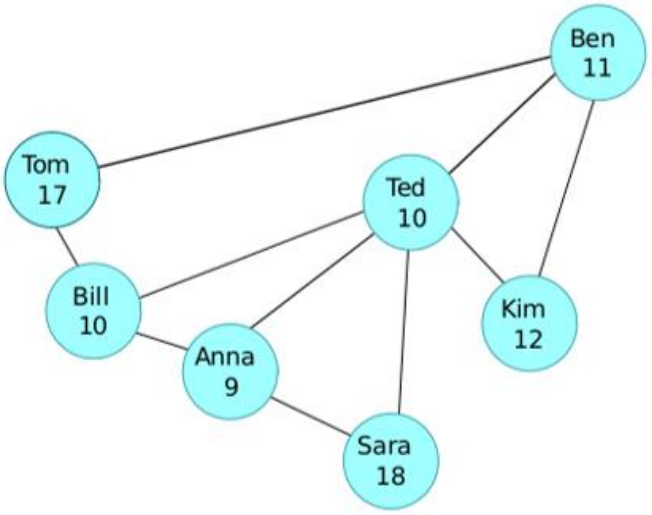

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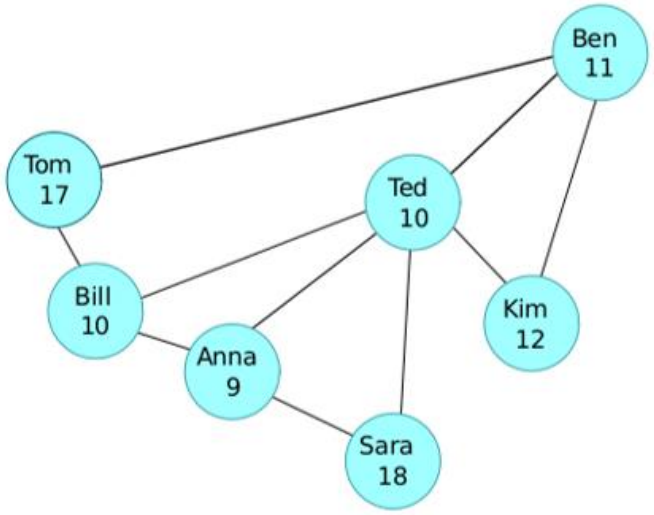

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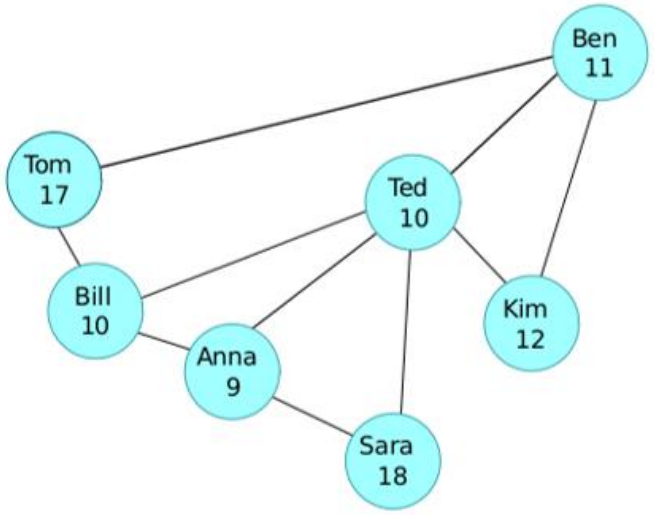

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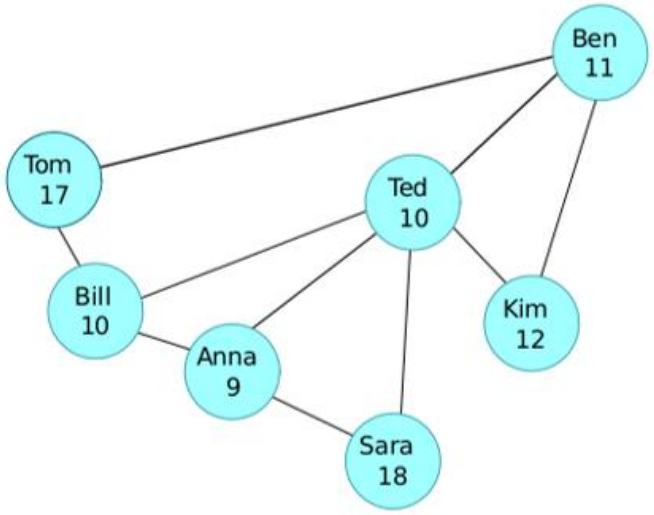

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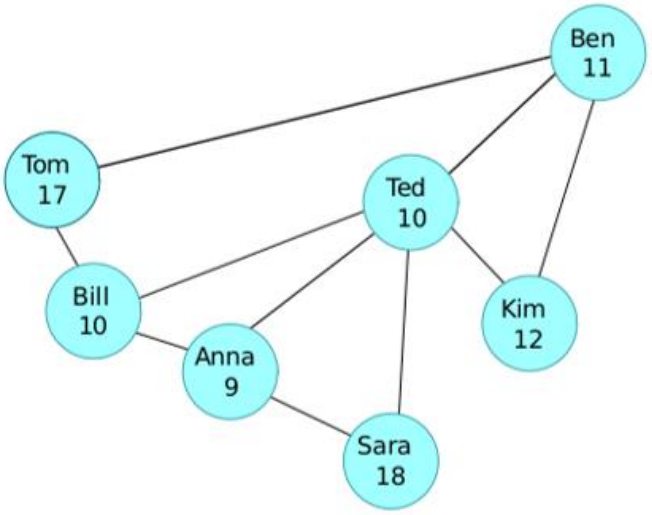

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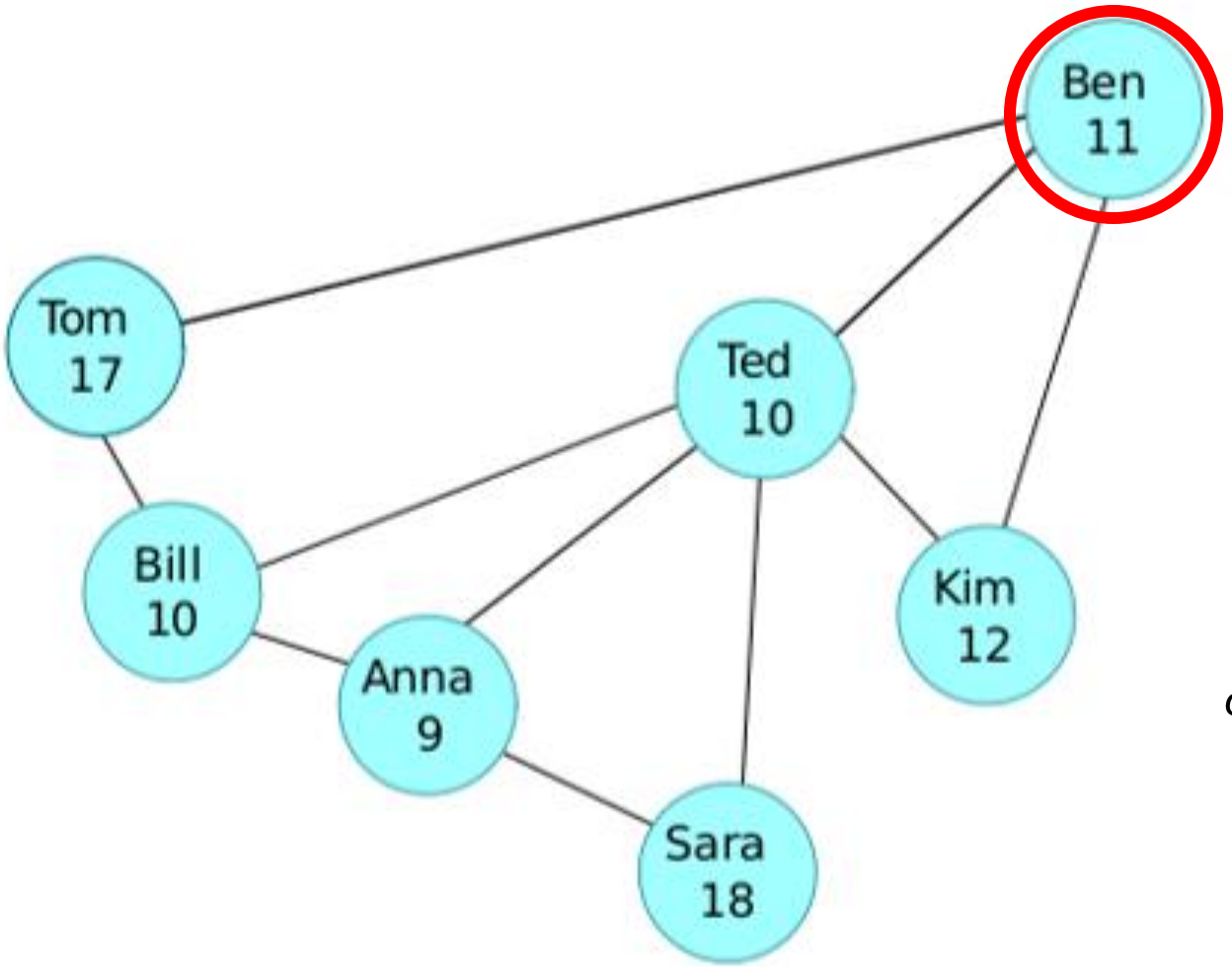

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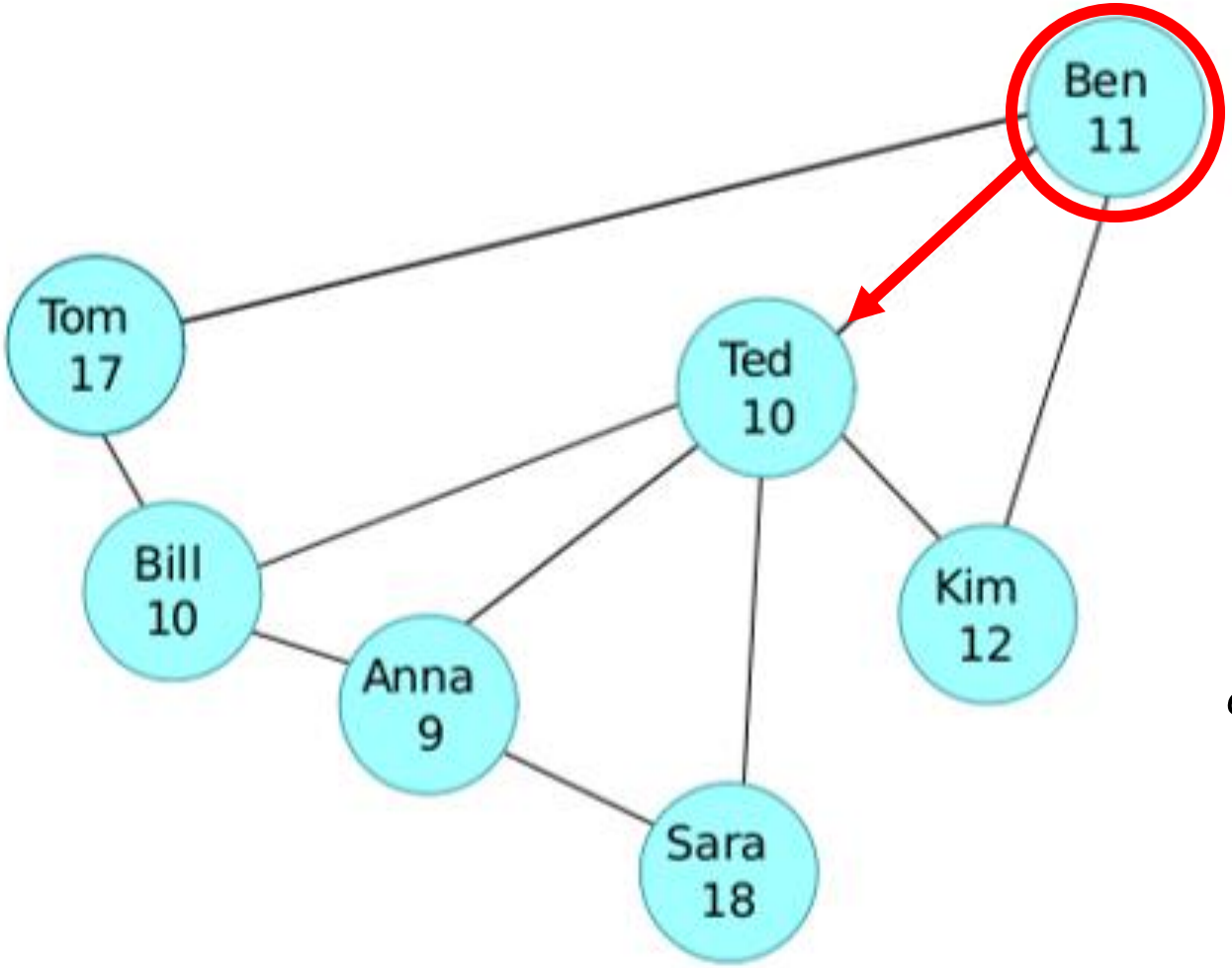

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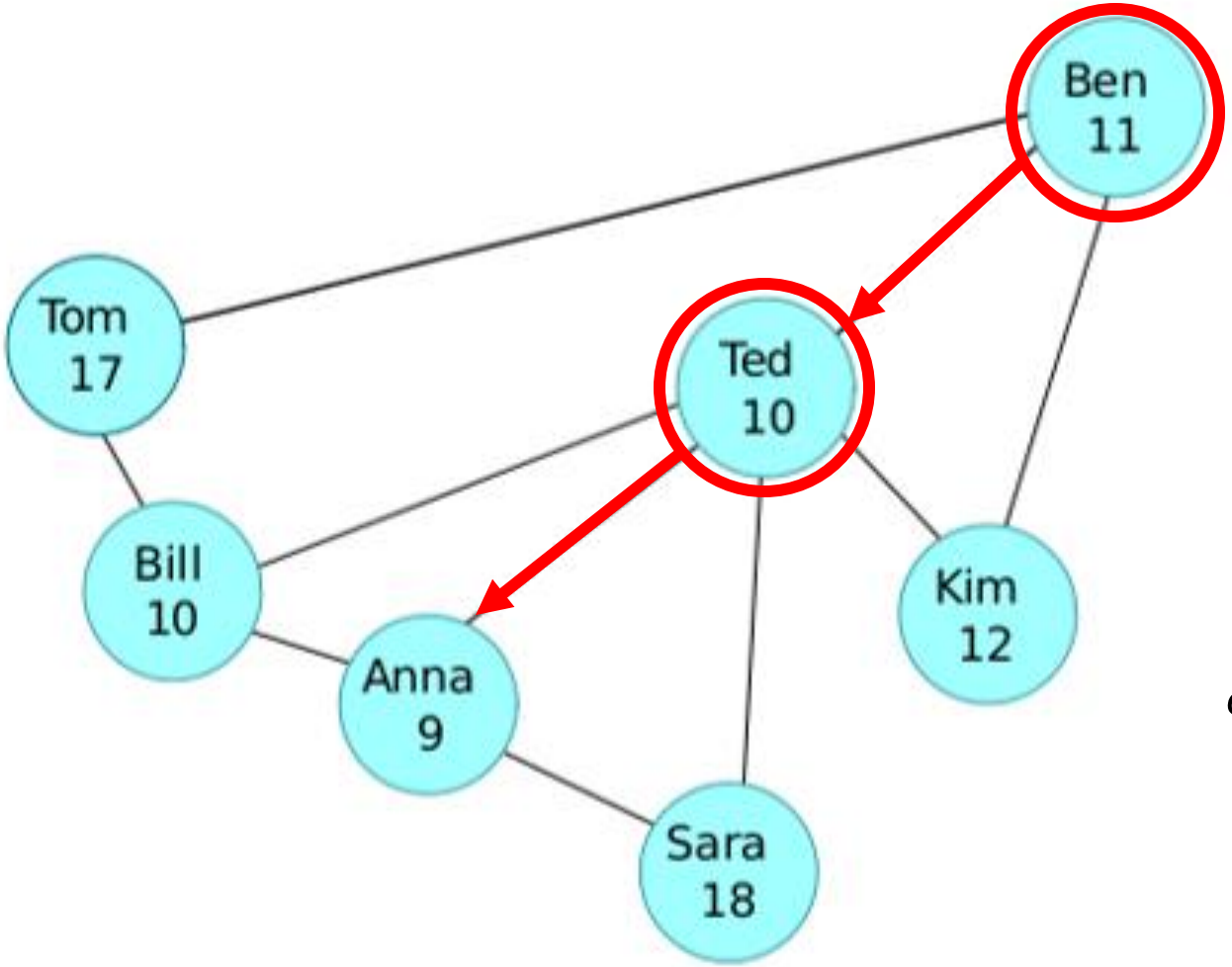

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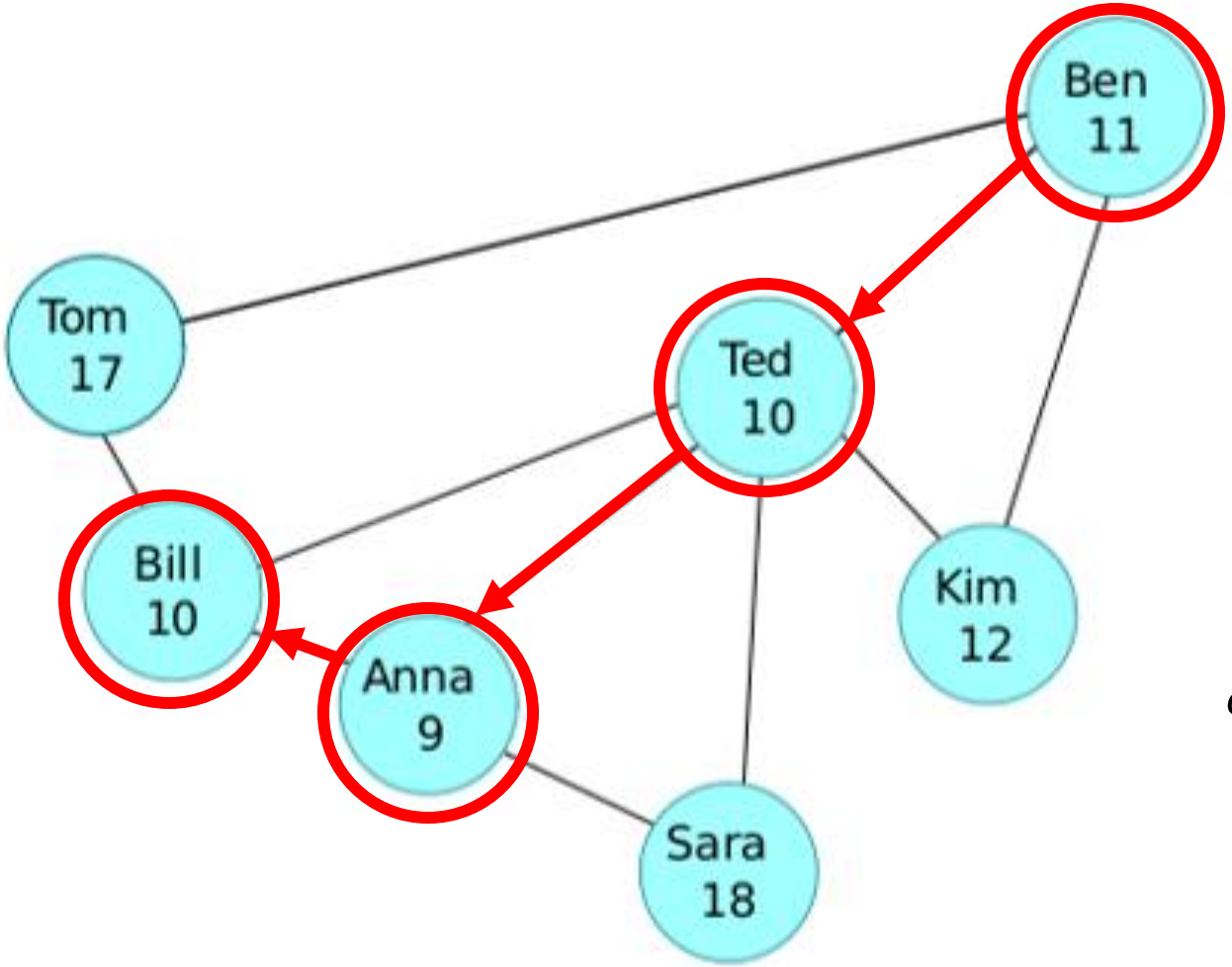

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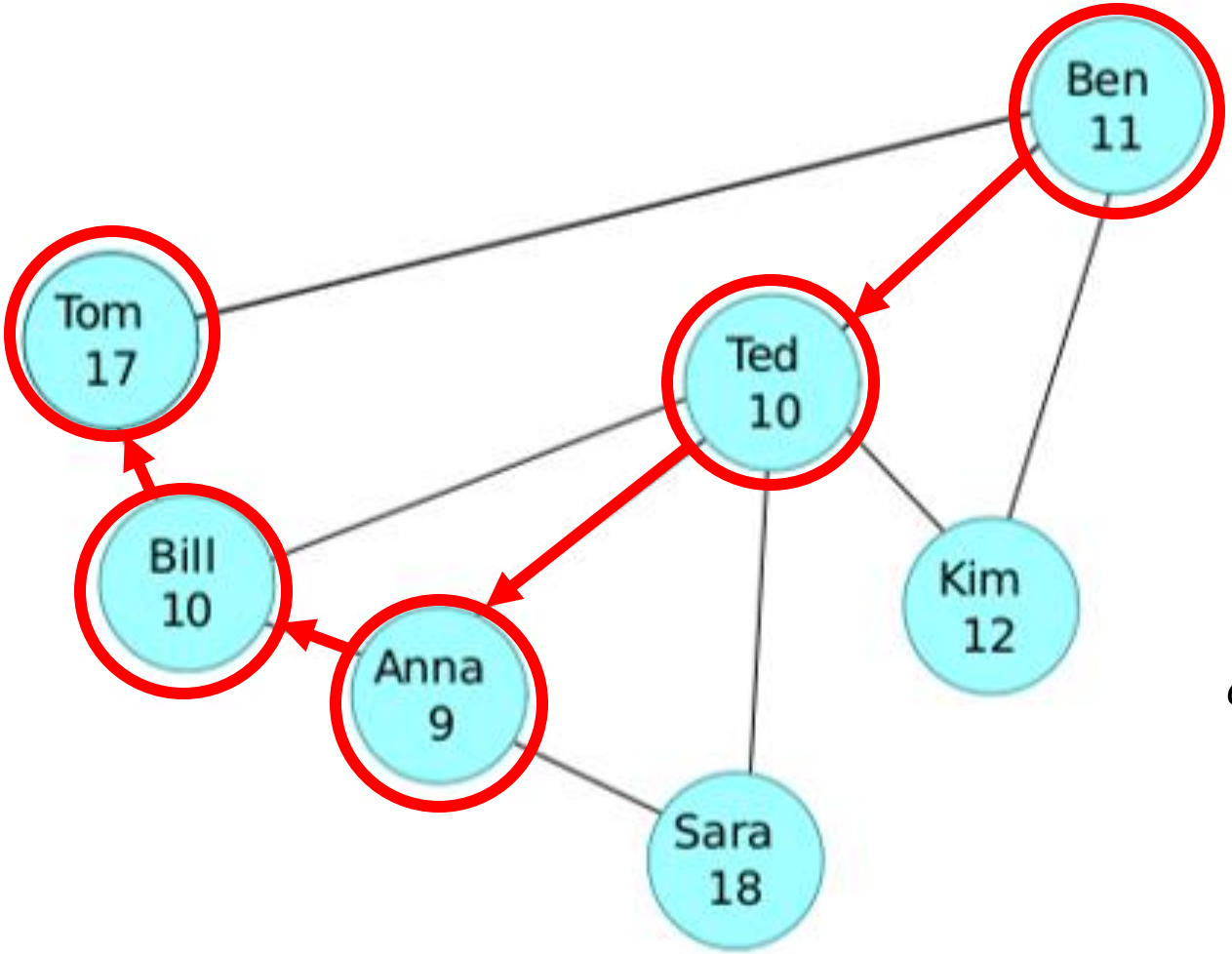

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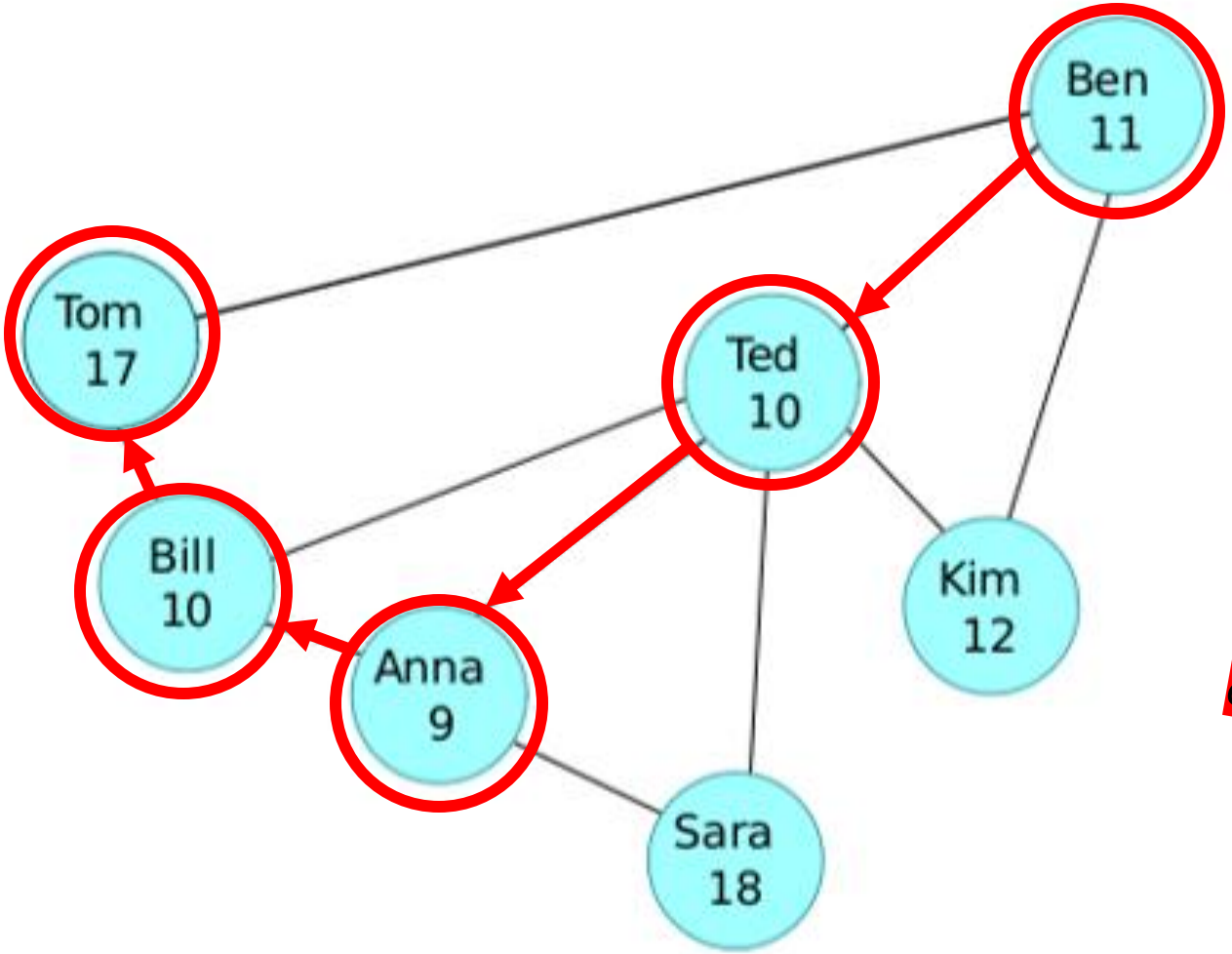

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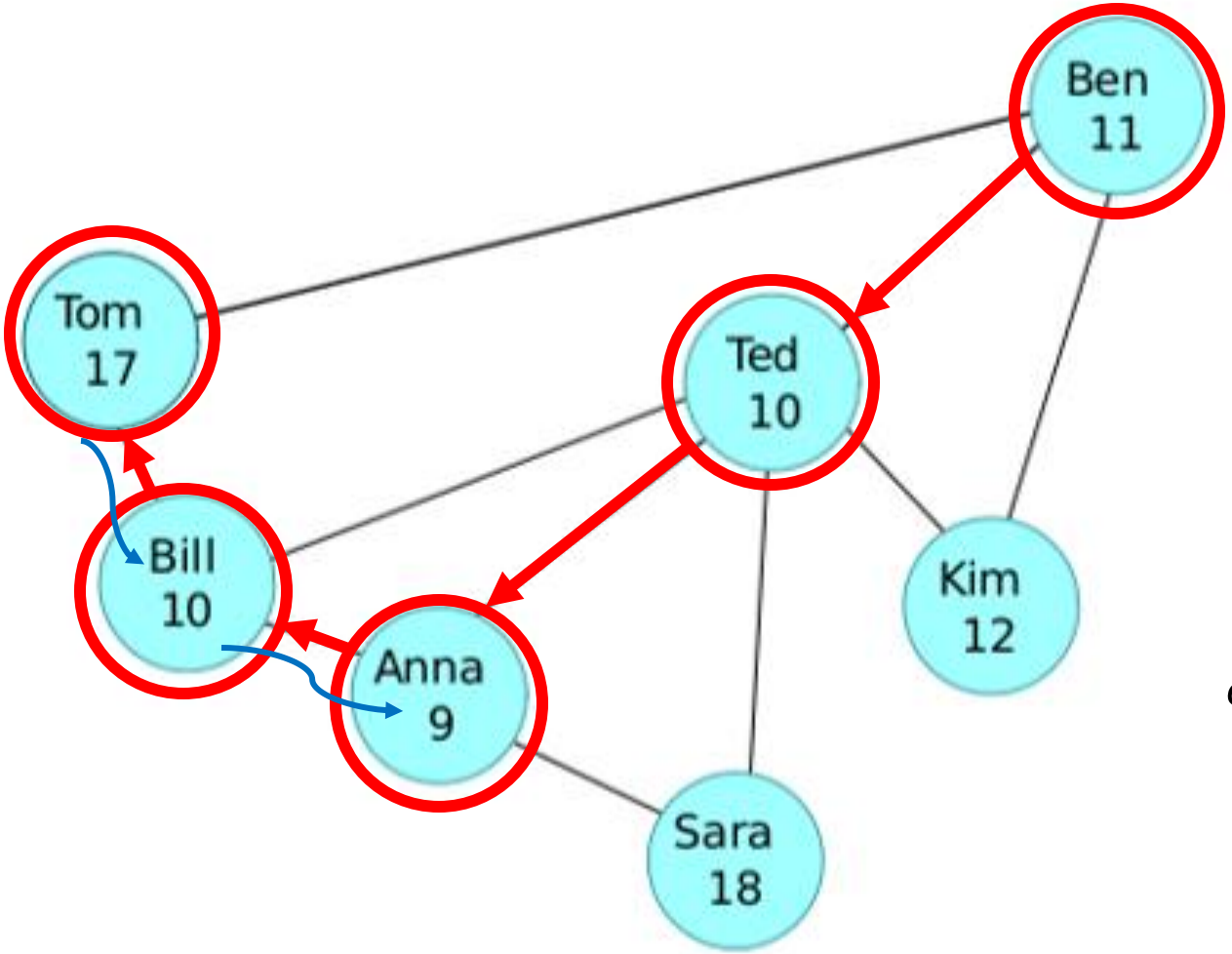

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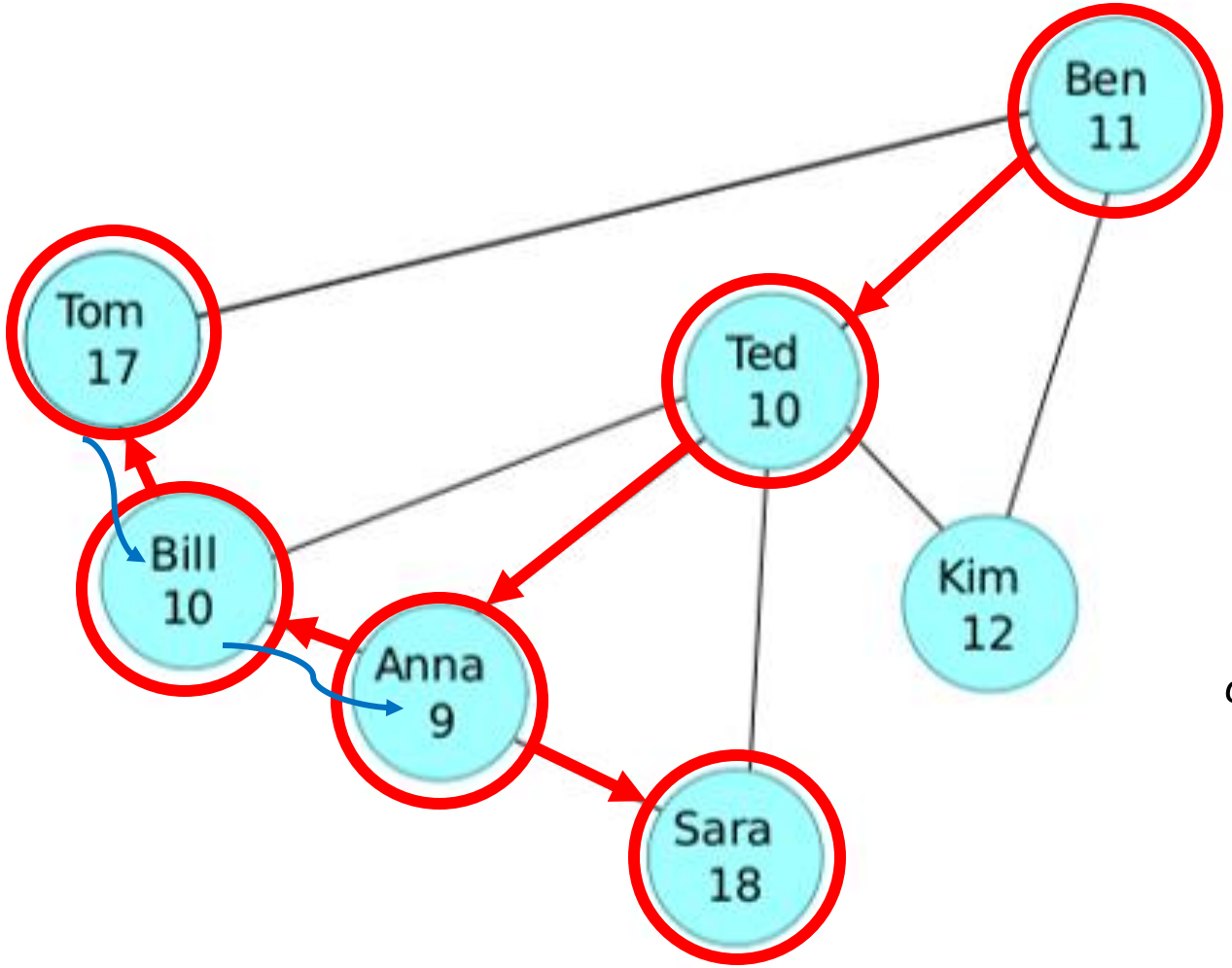

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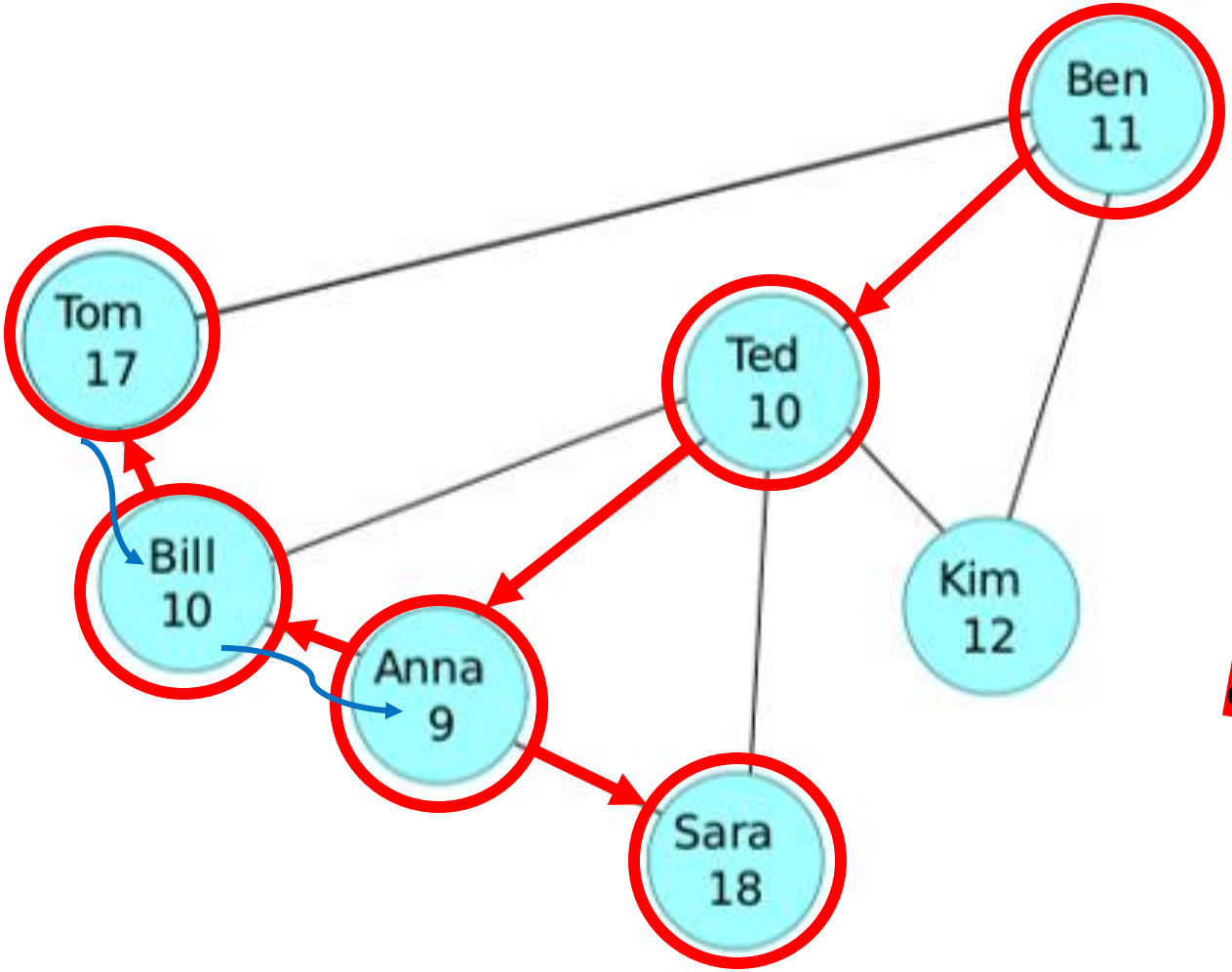

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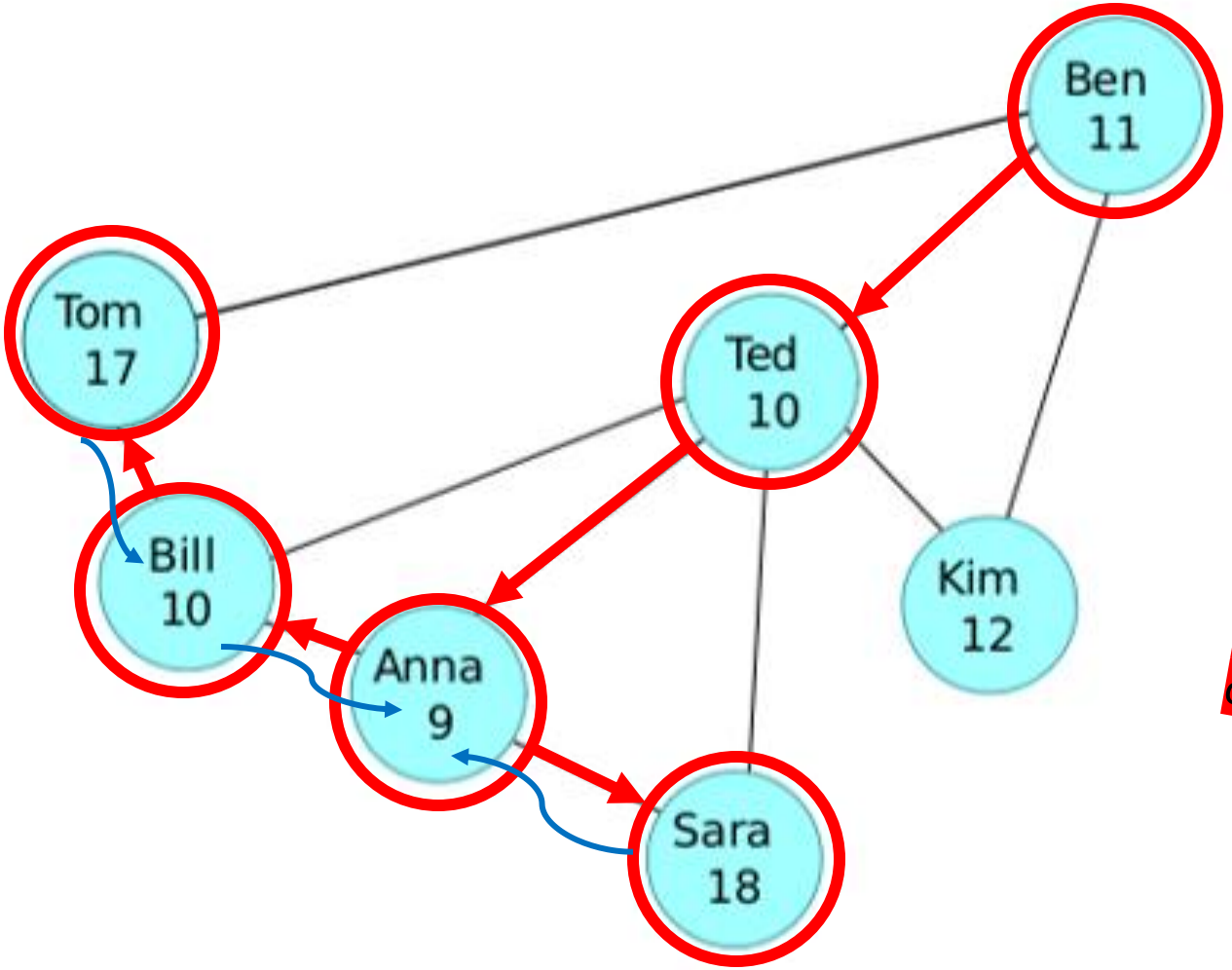

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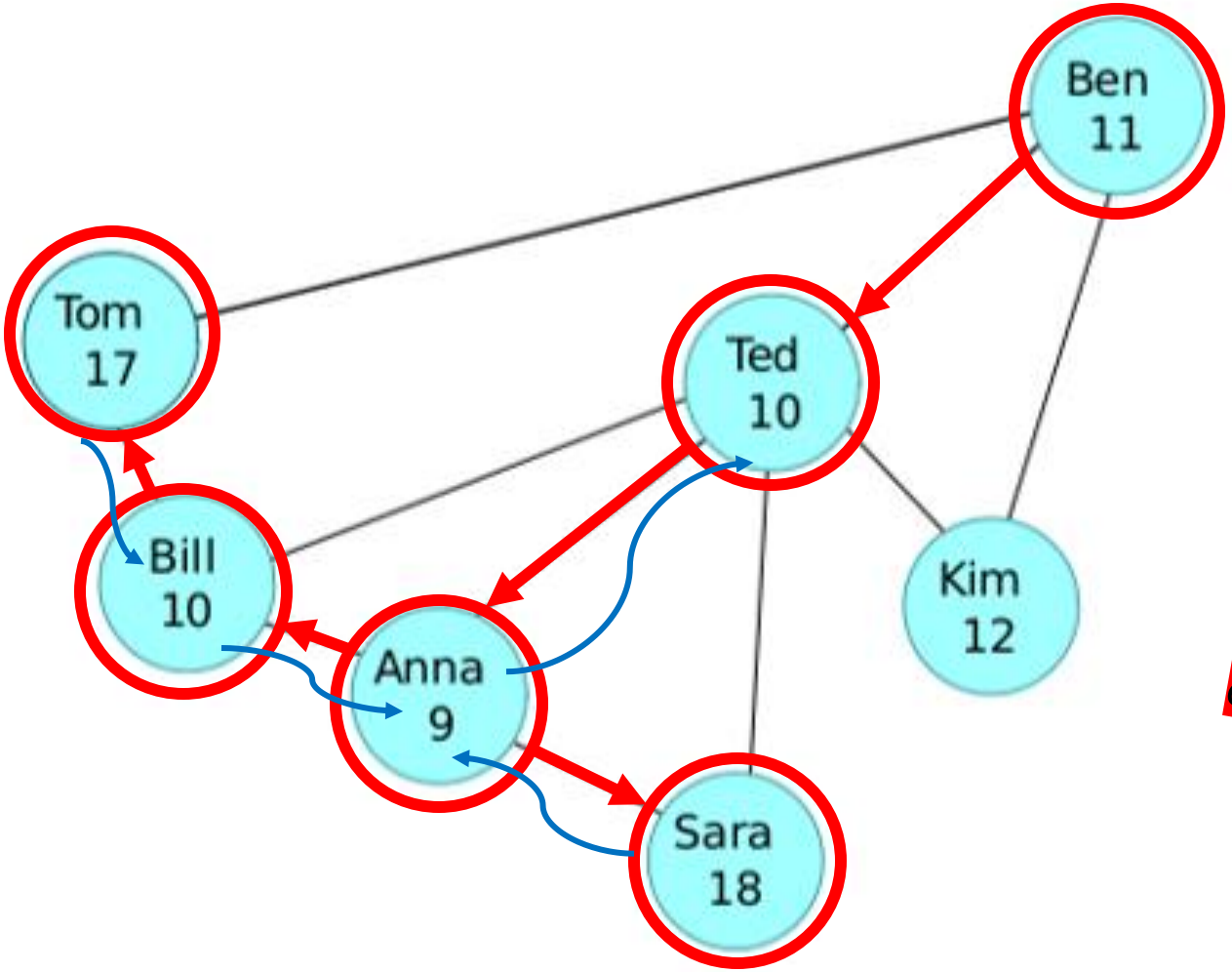

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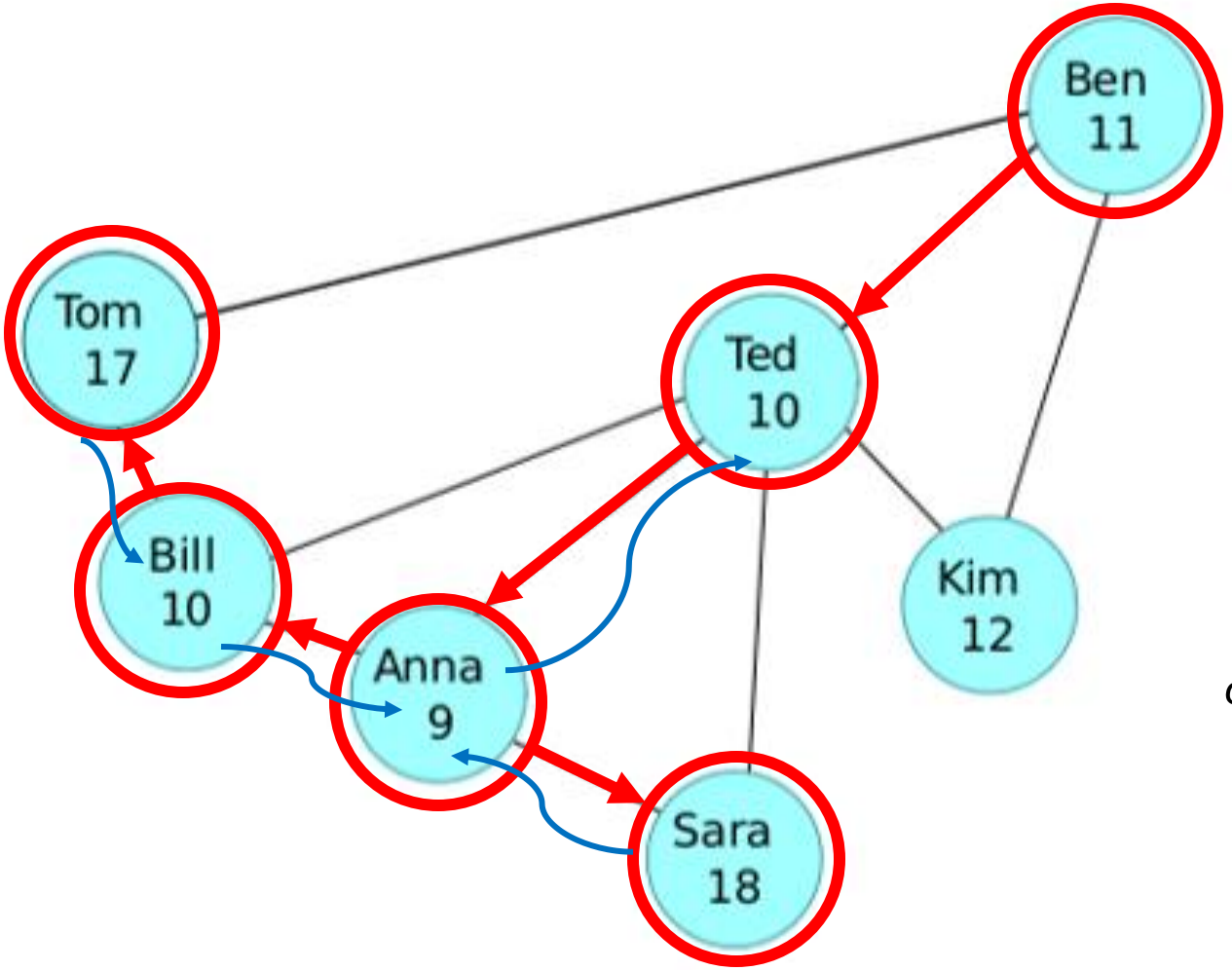

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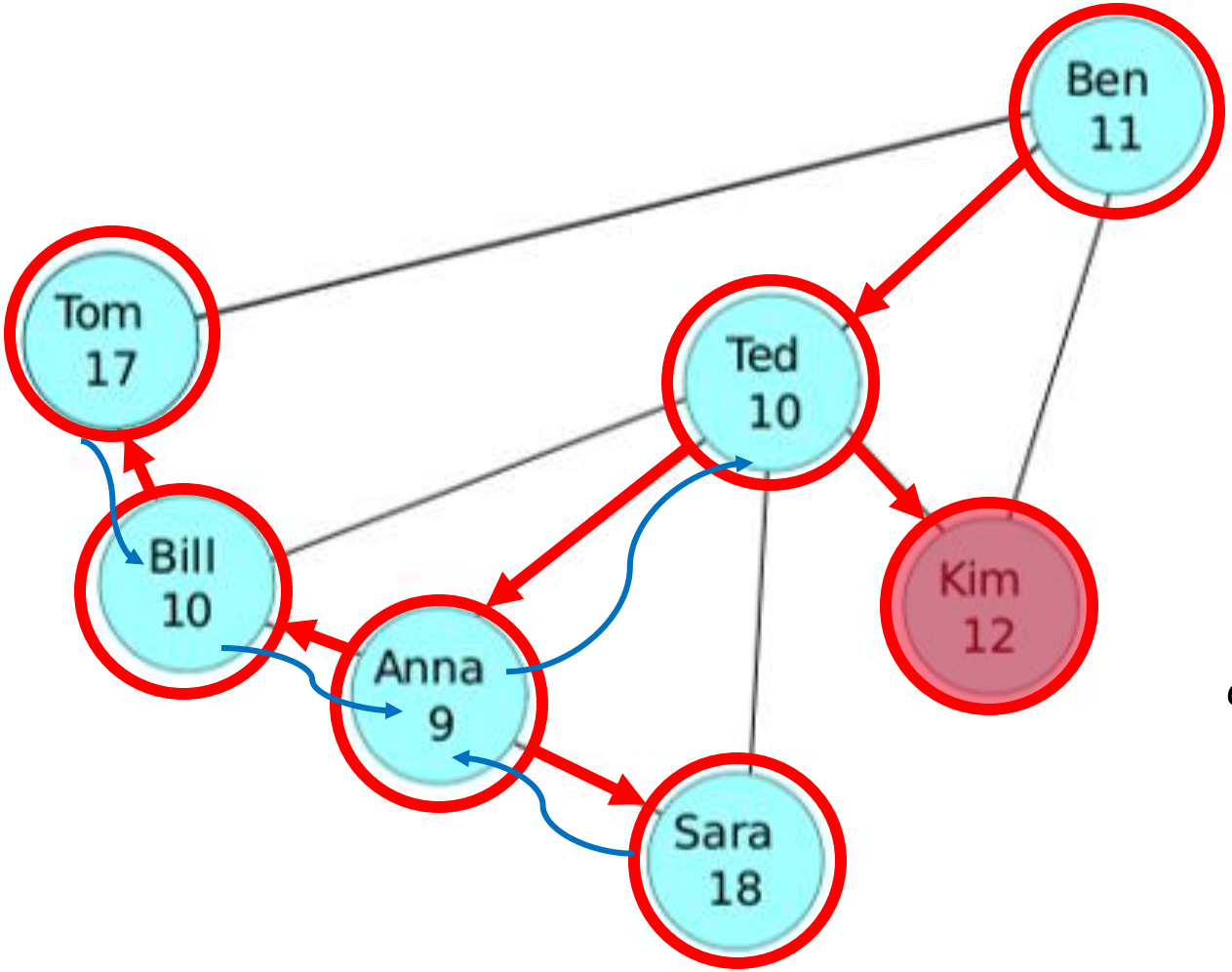

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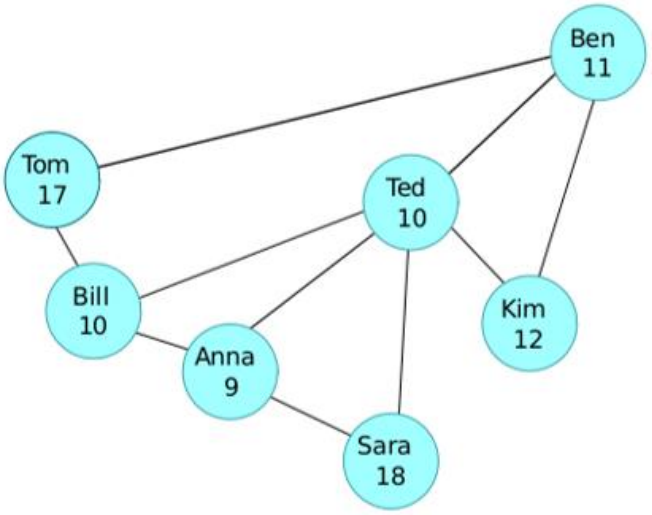

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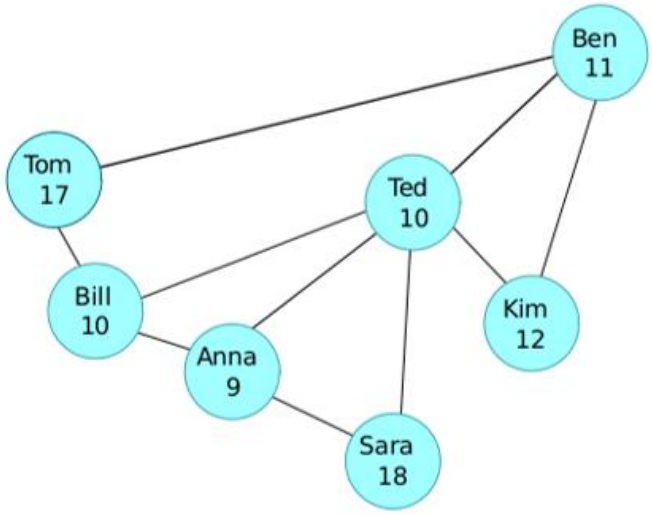

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Computational thinking topic: **algorithms**. This task is an example of *following an algorithm*.

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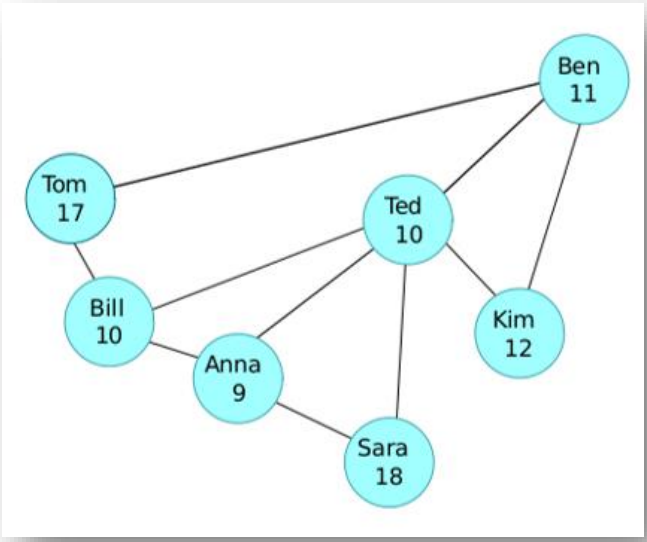
Some computer science terms explained

- Computer scientists work with data, which is often interconnected like the social network of the book sharing club in this task.
- We can think about a social network as a set of **elements** (people) and **connections** (friendships).
- Often systems from the real world can be thought of as a network. For example, a road grid plan as a set of **elements** (cities) and **connections** (roads).



- To represent sets of connections in these networks, computer scientists sometimes use **graphs** as **data structures.**
- **Algorithms** can be used for example to analyse and evaluate different properties of these graphs.

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Questions / comments / discussion

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Email: pact@mu.ie

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

https://bebras.techweek.ie

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