

Instagram followers and following

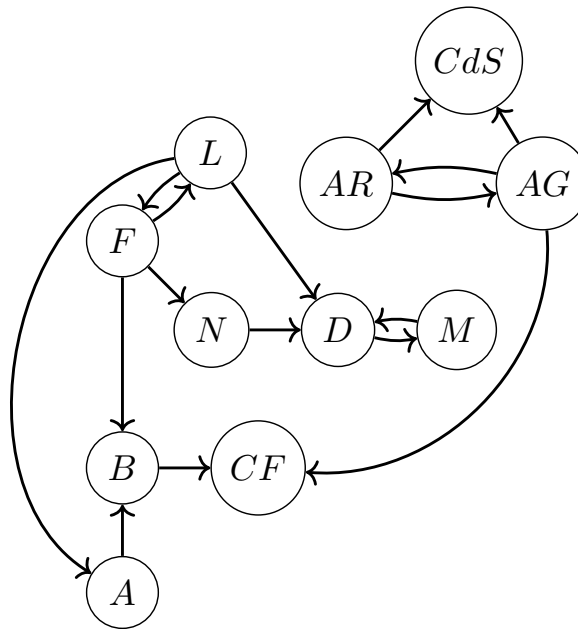
Difficulty level: beginner

Keywords

- Graph theory
- Directed graphs

Problem description

Consider the following graph, representing a network of relationships on Instagram: nodes indicate people (i.e., accounts), and there exists an arc from node A to node B if A is a follower of B.



Tasks

1. How many vertices/nodes and how many **arcs** does the graph have?
2. Who are the people with the most followers? And which ones with less?
3. Can we identify any subgroups?
4. Assuming that the accounts are all public, is it possible that one person, while not following another specific one, can anyway see some of their contents?