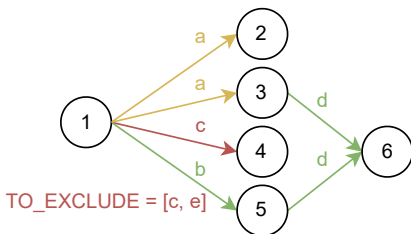


## A. 1. Graph and exclusion list initialization



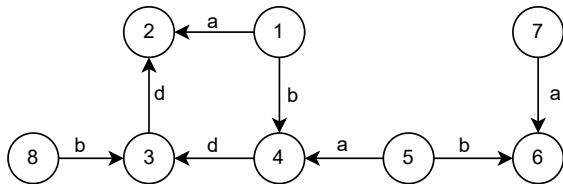
## 2. Go through every triplet, check conditions

- 1-a-2 } '1-a' occurs 2 times, choose randomly
- 1-a-3 } '1-a' occurs 2 times, choose randomly
- 1-c-4 } exclude, since 'c' is banned
- 1-b-5 } include, this triplet is okay
- 3-d-6 } these 2 are fine: <node>+<prop> are unique
- 5-d-6 } these 2 are fine: <node>+<prop> are unique

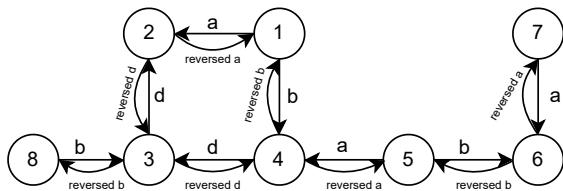
## 3. Final list

- 1-a-2
- 1-b-5
- 3-d-6
- 5-d-6

## B. 1. Initial graph: banned properties deleted

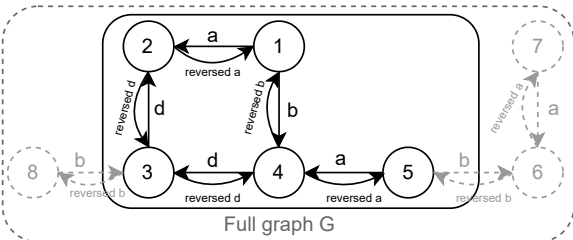


## 2. Extended graph: reversed properties added



## 3. Select subgraph, using BFS:

- from randomly selected node (here - '1'),
- depth (amount of hops) here = 2

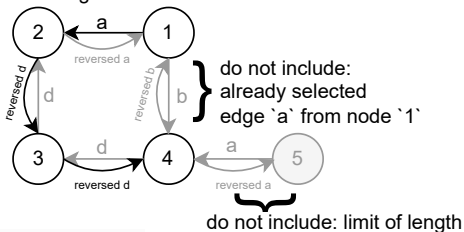


## 4. Create sequence by traversing subgraph:

remember to check the uniqueness of <node+edge>

Stop when:

- # edges in sequence > predefined limit
- no valid neighbors



## 5. Final sequence:

'1' - 'a' - '2' - 'reversed d' - '3' - 'reversed d' - '4'