Lab01

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1 Problem 1

[1)][1)]

- 1. (a) A
 - \bullet A C H
 - ullet A C H G F D
 - $\bullet\,$ A C H G F D I
 - (b) G
 - G I
 - \bullet G I H
 - G I H F
 - G I H F —J
 - $\bullet \ \mathbf{G} \mathbf{I} \mathbf{H} \mathbf{F} \mathbf{J} \mathbf{C}$
 - •
 - $\bullet \ \mathbf{G} \mathbf{I} \mathbf{H} \mathbf{F} \mathbf{J} \mathbf{C} \mathbf{D}$
 - [1]
 - (a) A
 - A BD
 - A BD CEH
 - ullet A BD CEH FGI
 - (b) G
 - \bullet G D
 - $\bullet \ \mathbf{G} \mathbf{D} \mathbf{H} \ \mathbf{G} \mathbf{D} \mathbf{H} \mathbf{FI}$
 - 3. [1)]
 - (a) A
 - \bullet A BCF
 - \bullet A BCF EDG
 - $\bullet~{\rm A-BCF-EDG-H}$

(b) • G

add a mark on the node passed, and end if no way to go find the next unmark one and started next round

2 Problem 2

Set state as nodes, use Hash Table. Key =; states, value =; list of states connect hash method: only applied on list

- 1. 3 states, started condition
- 2. Identify which node is the desired state (match by state)
- 3. 6 states from 1 state

3 Problem 3

Delete that given edge, and start from the either node of that edge, use BFS to find if there is a path lead to another node of the edge.