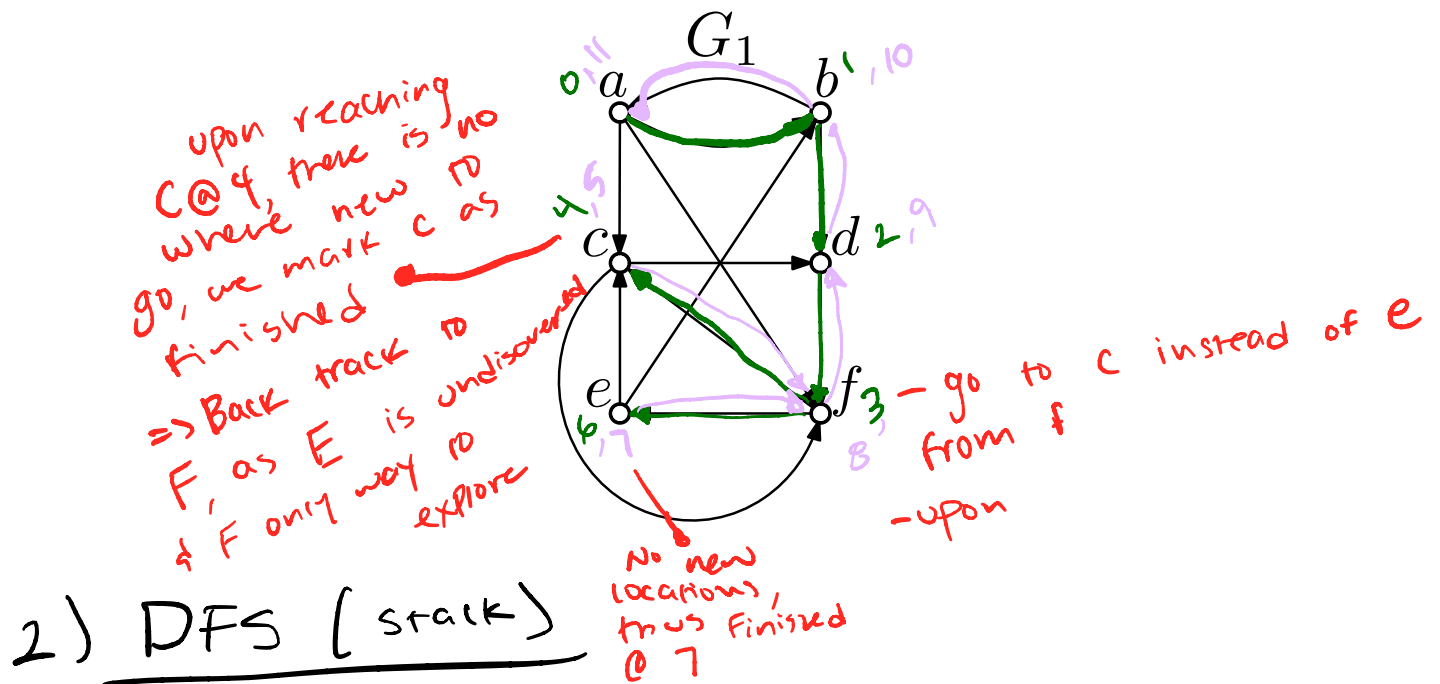# Practice Problems - DFS and BFS

DFS and BFS

For the following problems, assume that vertices are ordered alphabetically in the adjacency lists (thus you will visit adjacent vertices in alphabetical order).

(1) Execute a Breadth-First Search on the graph G_1, starting on vertex a. Specifiy the visit times for each node of the graph.

(2) Execute a Depth-First Search on the graph G_1, starting on vertex a. Specifiy the visit and finish times for each node of the graph

G_1

upon reaching
C@4, there is no
where new to
go, we mark c as
finished
=> Back track to
F, as E is undiscovered
& F only way to
explore

go to c instead of e
from f
-upon

No new
locations,
thus Finished
@ 7

2) **DFS (stack)**

	a	b	c	d	e	f
visited	0	1	4	2	6	3
finished	11	10	5	9	7	8