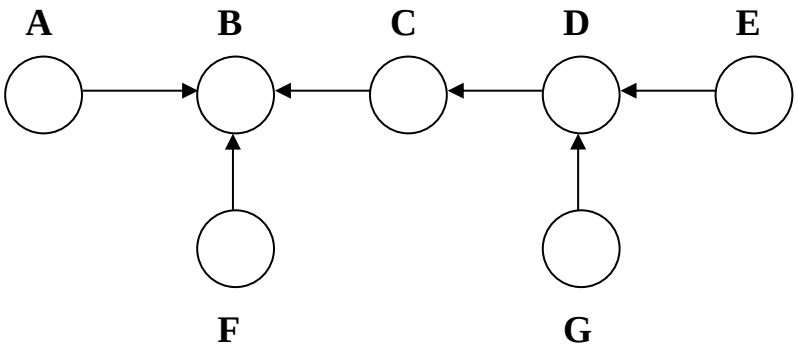
CECS 526 Assignment 6 (2 point)
Due : April 7, 2020, by class time on BeachBoard

Suppose a distributed system is implemented with the Raymond's tree-based algorithm for mutual exclusion, and the current tree configuration is shown below with Site B being the token holder. (Recall in the Raymond's tree structure, each node maintains a Holder variable to record its current parent node and a request queue Req_Q to record the sites where the requests the node has received from but not yet the token they are waiting for.)



Suppose further, that Process E wishes to enter CS right after Process G has sent out its request for CS. Fill in the table below in chronological order changes to the Req_Q and Holder variables in the given sites as request is made and each message is being transmitted in order to enable the requested CS to be executed. In the Event column, give a brief description of event that causes the update of data structure(s). The symbol "–" in the table below means "empty".

Name:Varun Lingabathini

Event	A		B		C		D		E		F		G	
	Req_Q	Holder	Req_Q	Holder	Req_Q	Holder	Req_Q	Holder	Req_Q	Holder	Req_Q	Holder	Req_Q	Holder
Initially	–	B	–	B	–	B	–	C	–	D	–	B	–	D
G requests for CS				B		B		C		D		B	G	D
E requests for CS				B		B	D	C	E	D		B	G	D
D requests C				B		B	D,G,E	C	E	D		B	G	D
C requests B				B	D	B	D,G,E	C	E	D		B	G	D
B sends token to C				C	D	C	D,G,E	C	E	D		B	G	D
C sends token to D				C		D	D,G,E	D	E	D		B	G	D
D sends token to G				C		D	E	G	E	D		B	G	G
G executes CS				C		D	E	G	E	D		B		G
G exits CS				C		D	E	G	E	D		B		G
D requests G				C		D	E	D	E	D		B		D
D sends token to E				C		D		E		E		B		D
E exits CS				C		D		E		E		B		D
Finally				C		D		E		E		B		D
