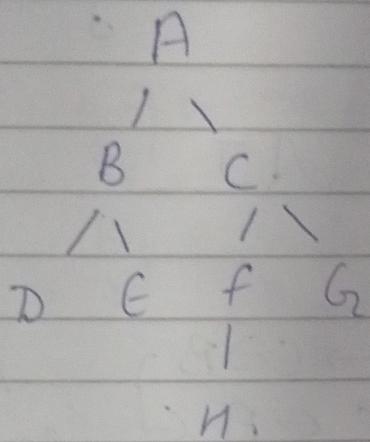


DFS =

Q1.

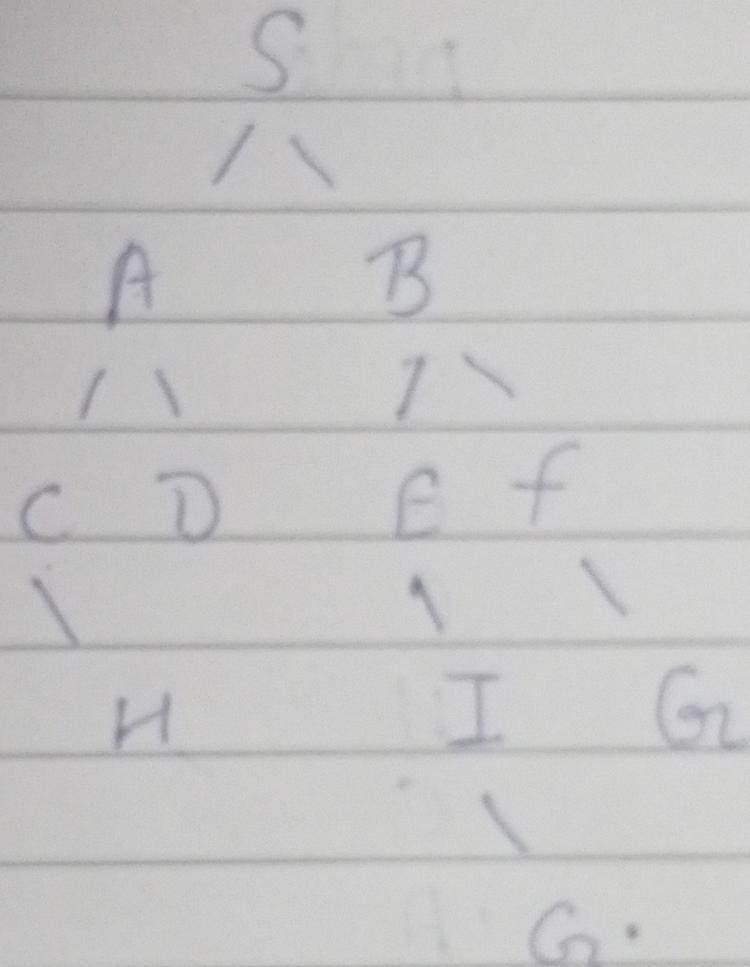


Step	Node Expanded	Action / Result
1	A	Go to B (Left)
2	B	Go to D (Left)
3	D	Backtrack to B
4	B	Go to E (Right)
5	E	Backtrack to B
6	B	Backtrack to A
7	A	Go to C (Right)
8	C	Go to F (Left)
9	F	Go to H
10	H	Goal found

Path:

A → B → D → B → E → B → A → C → F → H

Q. DFS :-



find a path from start (S) to (G₂) using DFS:-

Step	node	Expansion / Action
1	S	Go to A (left)
2	A	Go to C (left)
3	C	Go to H (left)
4	H	Backtrack to C
5	C	Backtrack to I
6	A	Go to D (right)
7	D	Backtrack to A
8	P	Backtrack to 3
9	S	Go to B (right)
10	B	Go to E (left)
11	E	Go to I (right)
12	I	Go to G (right)
13	G	Goal found

Path:

S → B → E → I → G