

# Alara Zeybek

dfs

Node visited

Stack

C	C
B	CB
A	CBA
(backtrack=bt)	CB
(bt)	C
D	CD
E	CDE
F	CDEF
G	CDEFG
H	CDEFGH → all the nodes have visited
bt	CDEFG
bt	CDEF
bt	CDE
bt	CD
bt	C
bt	-

bft

Node visited

Stack

C	C
dequeue()	-
B	B
D	BD
F	BDF
dequeue()	DF
A	DFA
dequeue()	FA
E	FAE
dequeue()	AE
G	AEG
dequeue()	EG
dequeue()	GH
H	GH
dequeue()	H
dequeue()	-



Q2

Step	V	vertex-set	A	B	C	D	E	F
1	-	A	0	15	(4)	-	-	-
2	C	A, C	0	12	4	(7)	-	-
3	D	A, C, D	0	12	4	7	(9)	-
4	E	A, C, D, E	0	(10)	4	7	9	19
5	B	A, C, D, E, B	0	10	4	7	9	(17)
6	F	A, C, D, E, B, F	0	10	4	7	9	17