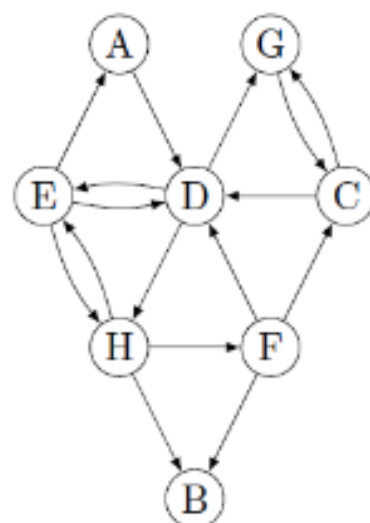


For a breadth-first search (BFS) of the graph below starting in vertex A, state the order the vertices are removed from the queue Q in the BFS-algorithm. We assume that the graph is given by adjacency lists, where the adjacency lists are sorted alphabetically.



ADEGHCBF



ADGHECFB



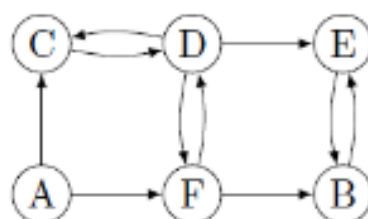
ADEGHCFB



ADEHBFCG

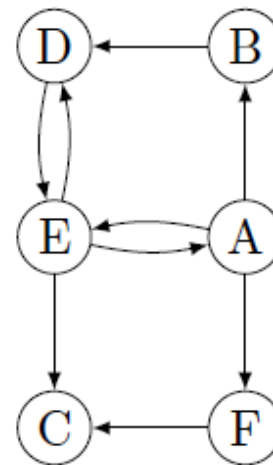


For each of the below set of edges, state whether they make up a legal BFS tree for a breadth-first traversal of the graph below starting in vertex A and for an arbitrary order of the graph's adjacency lists.



	Yes	No
(A,C) (A,F) (B,E) (F,B) (F,D)	<input checked="" type="radio"/> ✓	<input type="radio"/>
(A,C) (A,F) (C,D) (D,E) (F,B)	<input checked="" type="radio"/> ✓	<input type="radio"/>
(A,C) (A,F) (D,E) (E,B) (F,D)	<input type="radio"/>	<input checked="" type="radio"/> ✓
(A,C) (C,D) (D,E) (D,F) (F,B)	<input type="radio"/>	<input checked="" type="radio"/> ✓
(A,F) (D,C) (D,E) (E,B) (F,D)	<input type="radio"/>	<input checked="" type="radio"/> ✓

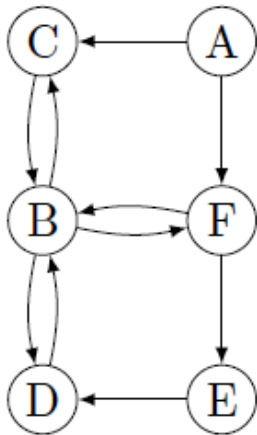
For each of the below set of edges, state whether they make up a legal BFS tree for a breadth-first traversal of the graph below starting in vertex A and for an arbitrary order of the graph's adjacency lists.



	Yes	No
(A,B) (A,E) (A,F) (E,C) (E,D)	<input checked="" type="radio"/> ✓	<input type="radio"/>
(A,B) (A,E) (A,F) (E,D) (F,C)	<input checked="" type="radio"/> ✓	<input type="radio"/>
(A,B) (A,F) (B,D) (D,E) (F,C)	<input type="radio"/>	<input checked="" type="radio"/> ✓
(A,B) (A,E) (A,F) (B,D) (E,C)	<input checked="" type="radio"/> ✓	<input type="radio"/>
(A,B) (A,E) (A,F) (B,D) (F,C)	<input checked="" type="radio"/> ✓	<input type="radio"/>

More ▼

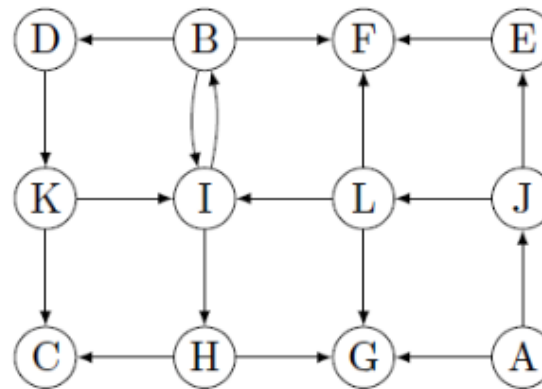
For each of the below set of edges, state whether they make up a legal BFS tree for a breadth-first traversal of the graph below starting in vertex A and for an arbitrary order of the graph's adjacency lists.



	Yes	No
(A,C) (A,F) (E,D) (F,B) (F,E)	<input checked="" type="radio"/> ✓	<input type="radio"/>
(A,C) (B,F) (C,B) (E,D) (F,E)	<input type="radio"/>	<input checked="" type="radio"/> ✓
(A,C) (A,F) (B,D) (C,B) (F,E)	<input checked="" type="radio"/> ✓	<input type="radio"/>
(A,C) (A,F) (D,B) (E,D) (F,E)	<input type="radio"/>	<input checked="" type="radio"/> ✓
(A,C) (A,F) (B,D) (F,B) (F,E)	<input checked="" type="radio"/> ✓	<input type="radio"/>

More ▼

For a breadth-first search (BFS) of the graph below starting in vertex A, state the order the vertices are removed from the queue Q in the BFS-algorithm. We assume that the graph is given by adjacency lists, where the adjacency lists are sorted alphabetically.



AGJEFLIBDKCH

☐

AGJ LEIFBHDCK

☐

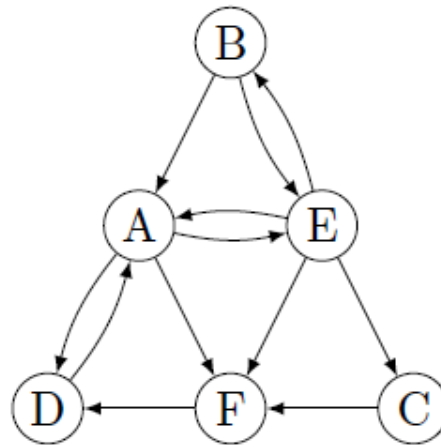
AGJELFIHBCDK

☐

AGJELFIBHDCK

☒


For a breadth-first search (BFS) of the graph below starting in vertex A, state the order the vertices are removed from the queue Q in the BFS-algorithm. We assume that the graph is given by adjacency lists, where the adjacency lists are sorted alphabetically.



ADEFBC



AFEDBC



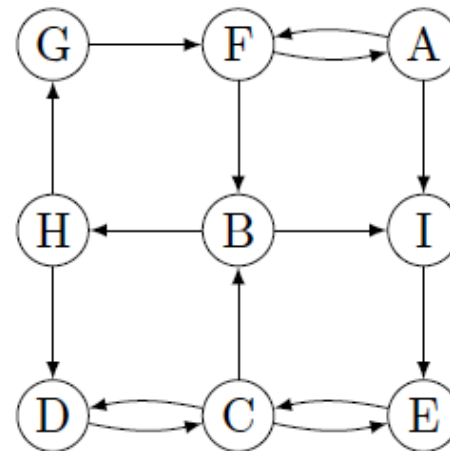
ADEFCB



ADEBCF



For a breadth-first search (BFS) of the graph below starting in vertex A, state the order the vertices are removed from the queue Q in the BFS-algorithm. We assume that the graph is given by adjacency lists, where the adjacency lists are sorted alphabetically.



AIFEBCHDG



AFBHDCEGI



AFIBEHCGD



AFIBEHCDG

