Quiz 5

Due Feb 16 at 11:59pm **Points** 8 **Questions** 8
Available Feb 9 at 11:59pm - Feb 17 at 11:59pm 8 days **Time Limit** 15 Minutes
Allowed Attempts 2

Take the Quiz Again

Attempt History

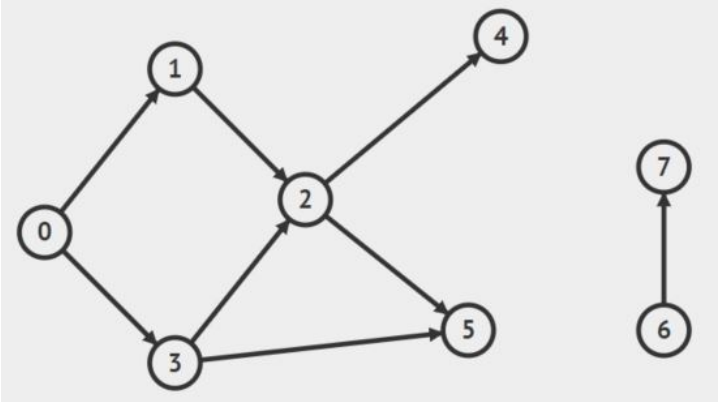
	Attempt	Time	Score
LATEST	Attempt 1	15 minutes	8 out of 8

ⓘ Answers will be shown after your last attempt

Score for this attempt: **8** out of 8
Submitted Feb 16 at 7:53pm
This attempt took 15 minutes.

Question 1

1 / 1 pts



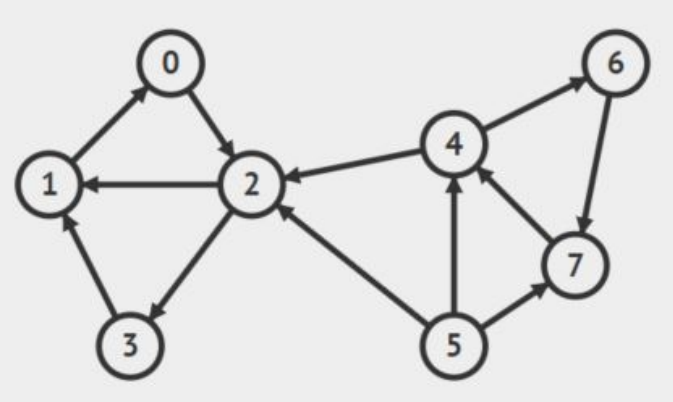
Which of the following is a topological sort of the graph above.

- 7, 6, 5, 2, 4, 3, 1, 0
- 6, 7, 0, 1, 3, 2, 5, 4

- 0, 1, 2, 3, 4, 5, 6, 7
- 0, 3, 2, 5, 1, 4, 6, 7
- None of the above

Question 2

1 / 1 pts

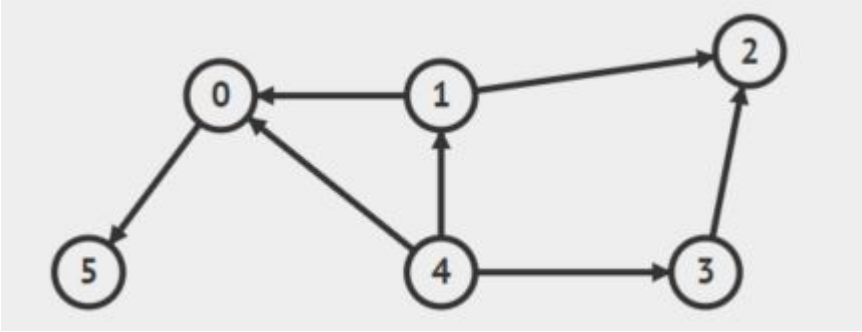


How many strongly connected components are there in the graph above?

- 0
- 1
- 2
- 3
- 4

Question 3

1 / 1 pts



A Breadth First Search Algorithm has been implemented using a queue data structure. One possible order of visiting the vertices of the graph above is:

- 0, 5, 4, 1, 2
- 4, 1, 0, 5, 2, 3
- 4, 0, 1, 3, 5, 2
- 1, 0, 5, 2, 4, 3

Question 4

1 / 1 pts

Given two vertices s and t in a connected graph G, which of the two traversals, BFS and DFS can be used to find if there is a path from s to t?

- Only DFS
- Only BFS
- Both BFS and DFS
- Neither BFS nor DFS

Question 5

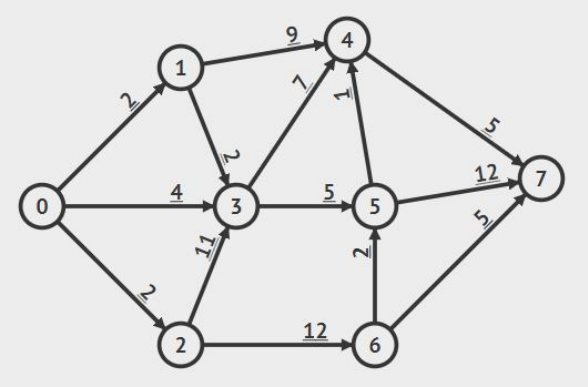
1 / 1 pts

Let G be a graph with n vertices and m edges. Assume that the graph is represented by an adjacency matrix. What is the tightest upper bound on the running time of DFS performed on G?

- O(n^2)
- O(m+n)
- O(mn)
- O(m)
- O(n)

Question 6

1 / 1 pts



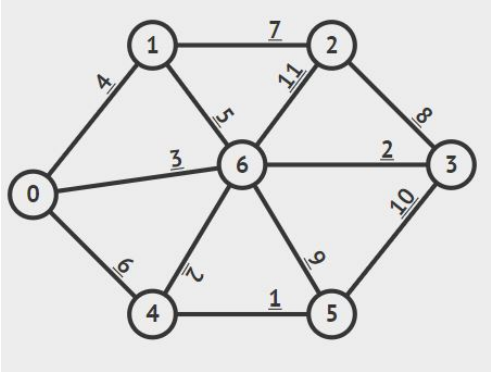
In the graph above, the shortest path from vertex 0 to vertex 7 has weight of

- 21
- 19
- 15

16

Question 7

1 / 1 pts



In the above graph, what is the weight of the MST?

17

18

19

20

21

Question 8

1 / 1 pts

In an undirected weighted graph the heaviest edge is never in the MST.

True

False

Quiz Score: **8** out of 8