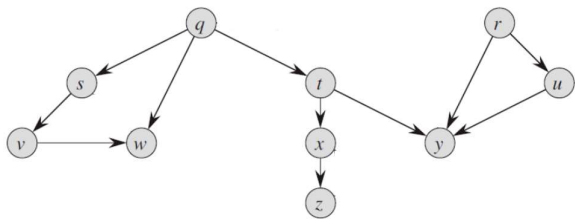


Started on	Thursday, October 19, 2023, 11:00 AM
State	Finished
Completed on	Thursday, October 19, 2023, 11:10 AM
Time taken	9 mins 53 secs
Points	3.00/20.00
Grade	1.50 out of 10.00 (15%)

Question 1

Partially correct

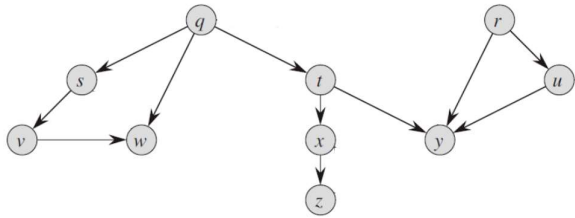
3.00 points out of 20.00



Starting at node Q, perform a DFS on the above graph. Consider the vertices in alphabetical order (for [example](#), if you have a choice between vertex X and vertex Y, choose vertex X because it is first alphabetically). Assume that each adjacency list is ordered alphabetically. Give the discovery and finishing times for each vertex. ONE FREE ANSWER: Discovery time on vertex Q is 1.

Vertex	Discovery Time	Finishing Time
Q	<input type="text" value="1"/> ✓	<input type="text" value="20"/> ✗
R	<input type="text" value="13"/> ✗	<input type="text" value="14"/> ✗
S	<input type="text" value="2"/> ✓	<input type="text" value="19"/> ✗
T	<input type="text" value="4"/> ✗	<input type="text" value="17"/> ✗
U	<input type="text" value="12"/> ✗	<input type="text" value="15"/> ✗
V	<input type="text" value="3"/> ✓	<input type="text" value="18"/> ✗
W	<input type="text" value="5"/> ✗	<input type="text" value="16"/> ✗
X	<input type="text" value="6"/> ✗	<input type="text" value="11"/> ✗
Y	<input type="text" value="7"/> ✗	<input type="text" value="10"/> ✗
Z	<input type="text" value="8"/> ✗	<input type="text" value="9"/> ✗

Your answer is partially correct.  
You have correctly selected 3.  
The correct answer is:



Starting at node Q, perform a DFS on the above graph. Consider the vertices in alphabetical order (for [example](#), if you have a choice between vertex X and vertex Y, choose vertex X because it is first alphabetically). Assume that each adjacency list is ordered alphabetically. Give the discovery and finishing times for each vertex. ONE FREE ANSWER: Discovery time on vertex Q is 1.

Vertex	Discovery Time	Finishing Time
Q	[1]	[16]
R	[17]	[20]
S	[2]	[7]
T	[8]	[15]
U	[18]	[19]
V	[3]	[6]
W	[4]	[5]
X	[9]	[12]
Y	[13]	[14]
Z	[10]	[11]

