

Student Name: _____

J#: _____

CSC 323 Algorithm Design and Analysis, Fall 2017
Instructor: Dr. Natarajan Meghanathan

Quiz 6 (Take Home)

Due: Nov. 7, 2017: 11.30 AM

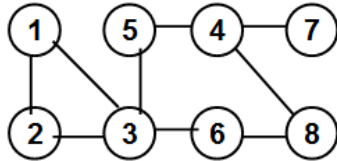
Max. Points: 50

Submission: Print this quiz, answer in the space provided and submit a hardcopy (either printed or handwritten-version in class at 11.30 AM). **Submissions after 11.30 AM will NOT be accepted.**

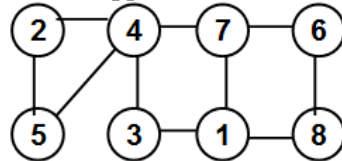
Q1 - 30 pts) Run a Breadth First Search (BFS) on the graph and find the level numbers of the vertices as well as identify the tree edges and cross edges.

Use the results to determine whether the graph is bipartite (2-colorable) or not. If the graph is bipartite, identify the two partitions of the graph. If the graph is not bipartite, identify the edges that prevent the graph from being bipartite.

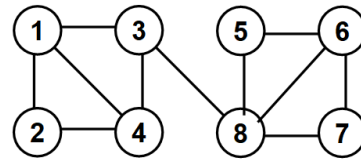
Armon Clark



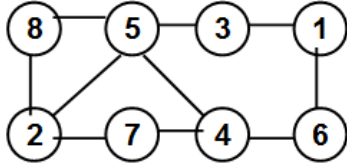
Daniel Epps



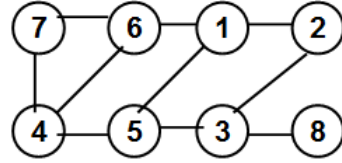
Allee Gammons



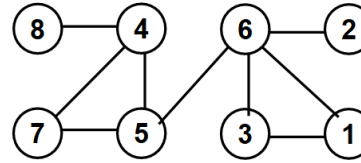
Menlik Getachew



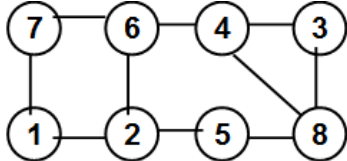
Taylor Hasty



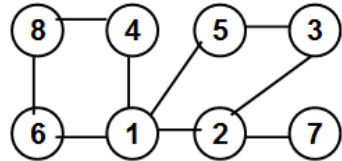
Derrick Jackson



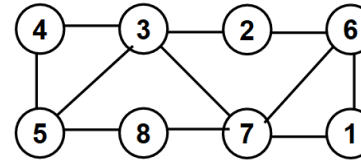
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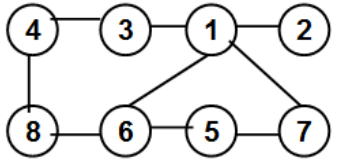
Jai-Michael McMillian



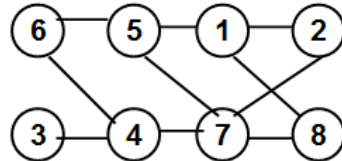
Nahu Merawi



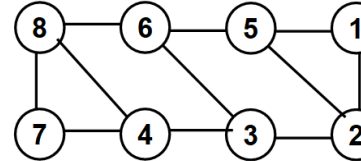
Taj Nelson



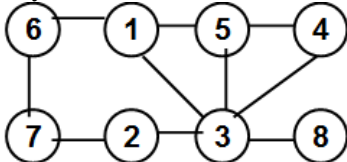
Patricia Perry



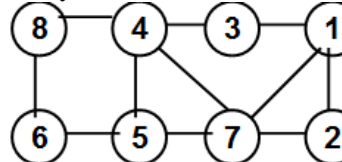
Daniel Powell



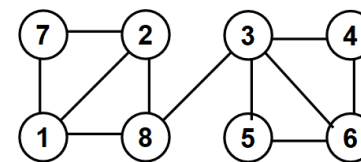
Aiyanna Price



Allaysia Roberts



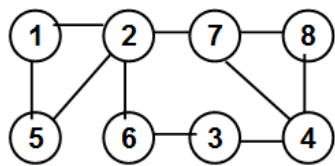
Dreshon Sanders



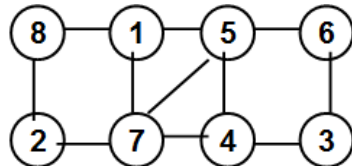
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Miracle Williams



Michael Wilson



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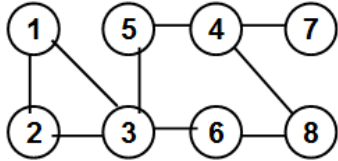
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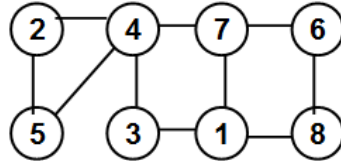
Q2 - 20 pts) Run a Depth First Search (DFS) on the graph. Write down the push and pop order for each of the vertices as well as identify the tree edges and cross edges.

Use the results to determine whether the graph has any articulation point. Show the work in detail.

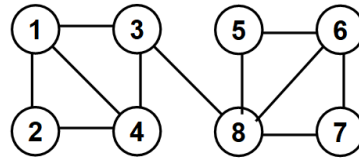
Armon Clark



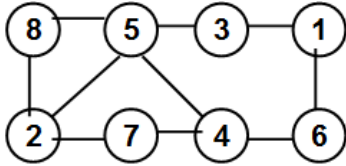
Daniel Epps



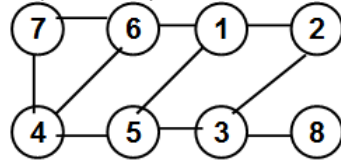
Allee Gammons



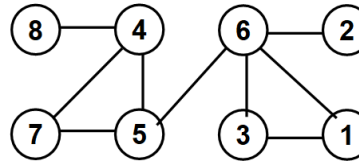
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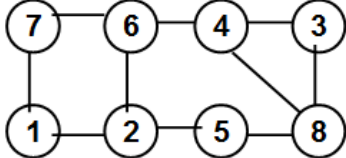
Taylor Hasty



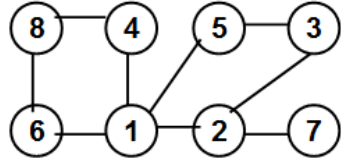
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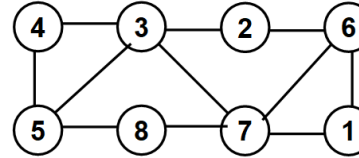
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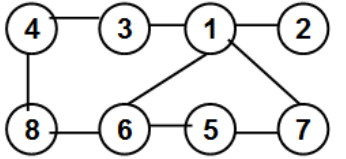
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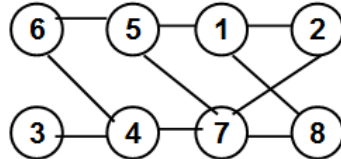
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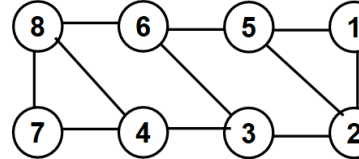
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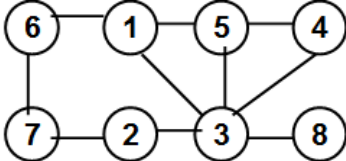
Patricia Perry



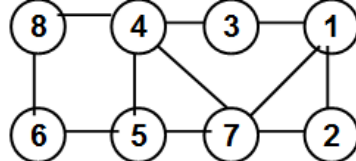
Daniel Powell



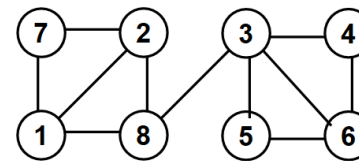
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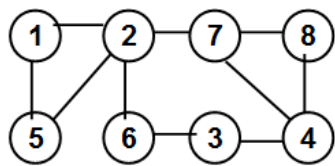
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