203 Working:

Heres the notes i wrote down for CAB203:

* Make sure you define V and E for each question
* extra useful functions in graphs.py and digraphs.py

Question 1

* Neighbours
* every possible pair of (a,b) not just ones specified in games
* make sure E is symmetric
* use N(V, E, u) function and loop through for (a,b) to check if its in games or has at least two unqiue neighbours
* then check the degree is the same between all vertices

Question 2

* Bivariate
* Check if players are in CSV file
* use graphs.bipartition for V and E, then use that result for digraphs.maxMatching to get matched games

Question 3

* Neighbours
* Create edges between games without the same players or referees
* Use the union of games and neighbors to join games into groups

Question 4

* Top Down
* Asymmetric, directed graph
* Add edges from referee to game for games the referee plays in, and from game to referee for games the referee is refereeing
* Use topOrdering(V, E) to sort

Question 5

* Flow control

Question 4: Graph for assignedReferees = {(a,b): c,(c,b): d} and gameGroups = [{(a,b)},{(c,b)}] would be:



1. this is the correct graph for q4

edges are directed from referee to game group for game groups they referee in and from game group to referee for game groups they play in