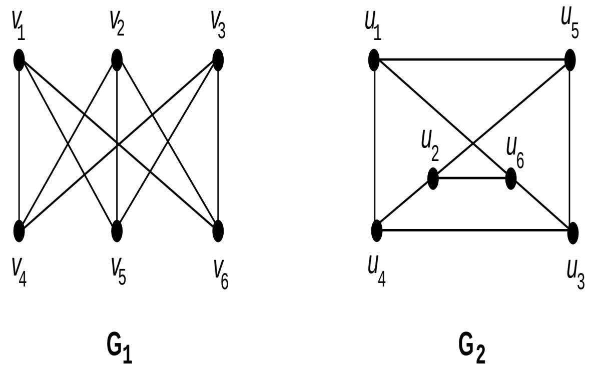
[20] **Homework ..** Graph Properties

Due: April 1, by the end of class

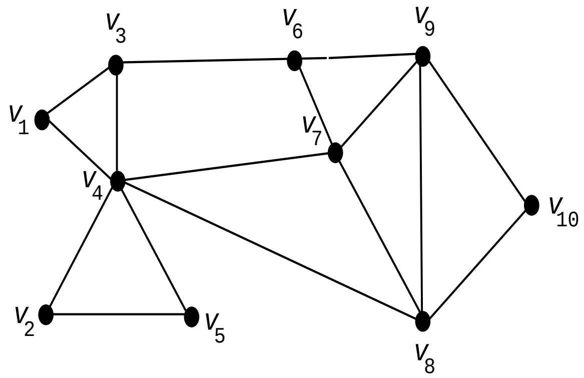
[5] Are the following two graphs isomorphic?



Justify your answer.

[10] Consider the following graph G.

1. Find the degree of each vertex for the graph G shown below.
2. Is it possible to trace the graph G beginning and ending at the same point, without lifting your pencil from the paper and without retracing lines? Justify your answer.
3. Is it possible to trace the graph G without lifting your pencil from the paper if it is not required that you begin and end at the same point? Retracing lines is not permitted. Justify your answer.



[5] Find a Hamiltonian cycle in the following graph.