- 1. Write code that will create a representation of a graph. You can decide how the data is encoded, but be sure to comment on how vertices and edges are stored.
- 2. Use this code to write functions to
  - (a) Determine if there is an Eulerian Path
  - (b) Determine if there is an Eulerian Cycle
  - (c) Determine if the graph is a complete graph
- 3. Describe how you might write a function to determine if a graph is planar, using one of the functions created in part 2. You do not need to write code, but you can write psuedocode.
- 4. What is the number of edges in  $K_n$ ?
- 5. What is a real life situation, problem, or event that could be well described by a graph? Explain what the vertices and edges would be in a graph representation of your scenario.
- 6. What are you doing to prepare for the final exam?