## Samantha Georges

- Explain what a Minimum Spanning Tree is in your own words
  A Minimum Spanning Tree is a spanning tree that has the minimum total cost.
  - 2. What could be the real world applications of an MST?

One real world application of an MST could be for a computer network. Take for example, you wanted to take the limited set of routes that you have and select a portion of them that would make the network complete for the lowest cost.

3. Hardcode a different Graph Matrix in your program

4. Does the sample graph hardcoded in your program have a unique Minimum Spanning Tree?

The sample graph hardcoded into my program has a unique Minimum Spanning tree because none of the edges have the same minimum weight.

5. What parameters point towards a unique MST?

Parameters that point towards a unique MST are if there are no duplicate weight graphs, meaning none have the same lengths. Thus, if there are only distinct edge weights, only one minimum spanning tree exists for the graph.