MTH 337, Sample Quiz 7
Spring 2022

You will have **15 minutes** to take the actual quiz.

1. A path in a graph is a collection of nodes, each node adjacent to the last. The distance between two nodes is the length (number of edges) of the shortest path connecting the two nodes. Write a Python function that will take a graph G and two nodes x and y as inputs and return the distance between x and y. (Hint: to do this, you will need to construct all the pathes connecting x to y.)

2. Create an animation that starts with an empty graph on 10 nodes, and adds one random edge every frame.

3. Explain what all of the inputs of the FuncAnimation function do.