Questions:

**1. Describe in your own words how Moran’s I is calculated**

Moran's I is calculated using the spatially weighted means based on location and value, and divided by sum of total spatial weights.

**2. Describe in your own words: what is a spatially-lagged variable?**

A spatially-lagged variable is weighted sum of the value observed at neighborhood locations.

**3. How does your analysis in this lab (as simple as it is) differ by how you have formalized W (e.g., space, neighbors) in two different methods? How might it affect analysis?**

The first analysis based on polygon that have lines share the border (neighbors), the second analysis used the IDW method that used centroids and distance, which can varies based on the set values (can be additional or less neighbor). When you row standardized, the analysis with more neighbor could potentially undermine the first analysis method (continuous-based weight)

**4. What does it mean if an observation falls in the “H-L” quadrant? Why might it be useful to detect such occurrences?**

This means that the observation is above average with neighbor observations mostly below than average. It is useful because it can point out the outlier.