This project is part of the coursera IBM applied data science capstone project

The problem:

I am part of a tour company in Singapore and am in charge of planning the itinerary for tourists to use. In order to plan the itinerary, I will to gather information regarding to:

* Attractions in Singapore: E.g Museums, historical sites
* Food
* Accommodation

Background:

Often times planning a visit to a place can be troublesome, presented by various options and an overload of information make it difficult to know what the best choices are. Having an itinerary planned out already and which is flexible would be useful.

In order to plan a good itinerary, I will first gather the top attractions in Singapore that should be visited. A list of attractions in Singapore can be gathered by visiting various websites that publish recommended places to visit, with ratings and reviews.

From there, I have to pick accommodations that are good choices to stay at. In order to choose an accommodation, I hypothesize that the accommodation should be in close proximity to where the hotspot tourist attractions are. This can be done by using spatial analysis, to find the best neighbourhood in Singapore that is surrounded by the most attractions. I will also have to factor in transport network, price, and rating of the accommodation.

After I have located where all the attractions in Singapore are, and potential accommodations to stay in, I can then plan out food and additional activities based on location. This will be done by using foursquare API that allows searching for recommended venues nearby a specified location. This is useful as sometimes tourists get tired and just want to visit locations that are nearby to where their accommodation is located. Having a list of things to do, places to eat, around their accommodation will be helpful for them, providing them good and useful options.