Rating Criteria	Requirements	Python	R	Weight
Data Visualization	Presentation of Results	6	9	25.00%
	Variety of Presentation Options	folium, gmaps, geopandas	ggmap, mapview	
	Ease of Interpretation	icon size	icon size, color gradient, legend	
Ease of Use		6	9	
	Learning Time	2 weeks	1 week	30.00%
	Readibility- natural connotation & understanding	code extremely easy to read	less straight forward but syntax is logical	
	Writeability- lines of code necessary	33	23	
	Simplicity	need to write for loop for getting geocodes of a table	use of single function to get geocodes of a table	
	Consistancy	once code was established, can work with any table that has information about a location	once code was established, can work with any table that has information about a location	
	Maintence- ease of updating code for data changes	stack overflow, personal blogs	stack overflow, personal blogs	
Processing Limits		10	10	F 000/
_	Baselines: Excel: 1,048,576 rows X 16,384 columns	2500 queries per day limit for free google API	2500 queries per day limit for free google API	5.00%
Processing Speed		9	8	5.00%
	Averages of team measurements	0:58 minutes	1:06 minutes	3.0070
Compatibility		10	10	
	Operating Systems (Windows/ Mac /Linux)	no issues	no issues	15.00%
	Form of Data Files (Excel, CSV, etc)	csv used - no issues	csv used - no issues	
	Export Options/ Sharing of Results	can export code and results to various types of files	can export code and results to various types of files	
Resources		9	10	
	Online Communities	stackoverflow, personal blogs - less clear examples online	stackoverflow, personal blogs	20.00%
	Document Management	used locally stored documents	used locally stored documents	
	Packages & Libraries	many packages that can be used together to create desired result	many packages that can be used together to create desired result	
	Total	7.55	9.35	