**DAY 18 ASSIGNMENT**

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| **Date:** | **06-06-2020** | **Name:** | **Ashish Shanbhag** |
| **Course:** | **PYTHON** | **USN:** | **4AL16EC008** |
| **Topic:** | **Project Exercise on Building a Geocoder Web Service** | **Semester & Section:** | **8th A** |
| **Github Repository:** | **Ashish Shanbhag** |  |  |

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| **FORENOON SESSION DETAILS**      **Building a Geocoder Web Service**  Datasets are rarely complete and often require pre-processing. Imagine some datasets have only an address column without latitude and longitude columns to represent your data geographically. In that case, you need to convert your data into a geographic format. The process of converting addresses to geographic information Latitude and Longitude to map their locations is called Geocoding. Geocoding is the [computational](https://en.wikipedia.org/wiki/Computational) process of transforming a [physical address](https://en.wikipedia.org/wiki/Address_(geography)) description to a [location](https://en.wikipedia.org/wiki/Location_(geography)) on the Earth’s surface. Geocoding Single Address To geolocate a single address, you can use Geopy python library. [Geopy](https://geopy.readthedocs.io/en/stable/" \t "_blank)has different Geocoding services that you can choose from, including Google Maps, ArcGIS, AzureMaps, Bing, etc. Some of them require API keys, while others do not need.  locator=Nominatim(user\_agent=”myGeocoder”) location = locator.geocode(“Champ de Mars, Paris, France”)  We create locator that holds the Geocoding service, Nominatim. Then we pass the locator we created to geocode any address, in this example, the Eifel tower address.  print(“Latitude = {}, Longitude = {}”.format(location.latitude, location.longitude))  Now, we can print out the coordinates of the location we have created.\  Latitude = 48.85614465, Longitude = 2.29782039332223 |