

Creado por:

Isabel Maniega

Folium

```
In [1]: # pip install folium
```

```
In [2]: import pandas as pd
import folium
```

Extraemos la información de un dataset sobre las estaciones de las bicicletas en Dublín:

```
In [3]: location = "https://data.smartdublin.ie/dataset/33ec9fe2-4957-4e9a-ab55-c5e917c7a9ab/resource/2dec86ed-76ed-47a
```

```
In [4]: bike_station_locations
```

Out[4]:		Number	Name	Address	Latitude	Longitude
	0	42	SMITHFIELD NORTH	Smithfield North	53.349562	-6.278198
	1	30	PARNELL SQUARE NORTH	Parnell Square North	53.353462	-6.265305
	2	54	CLONMEL STREET	Clonmel Street	53.336021	-6.262980
	3	108	AVONDALE ROAD	Avondale Road	53.359405	-6.276142
	4	56	MOUNT STREET LOWER	Mount Street Lower	53.337960	-6.241530

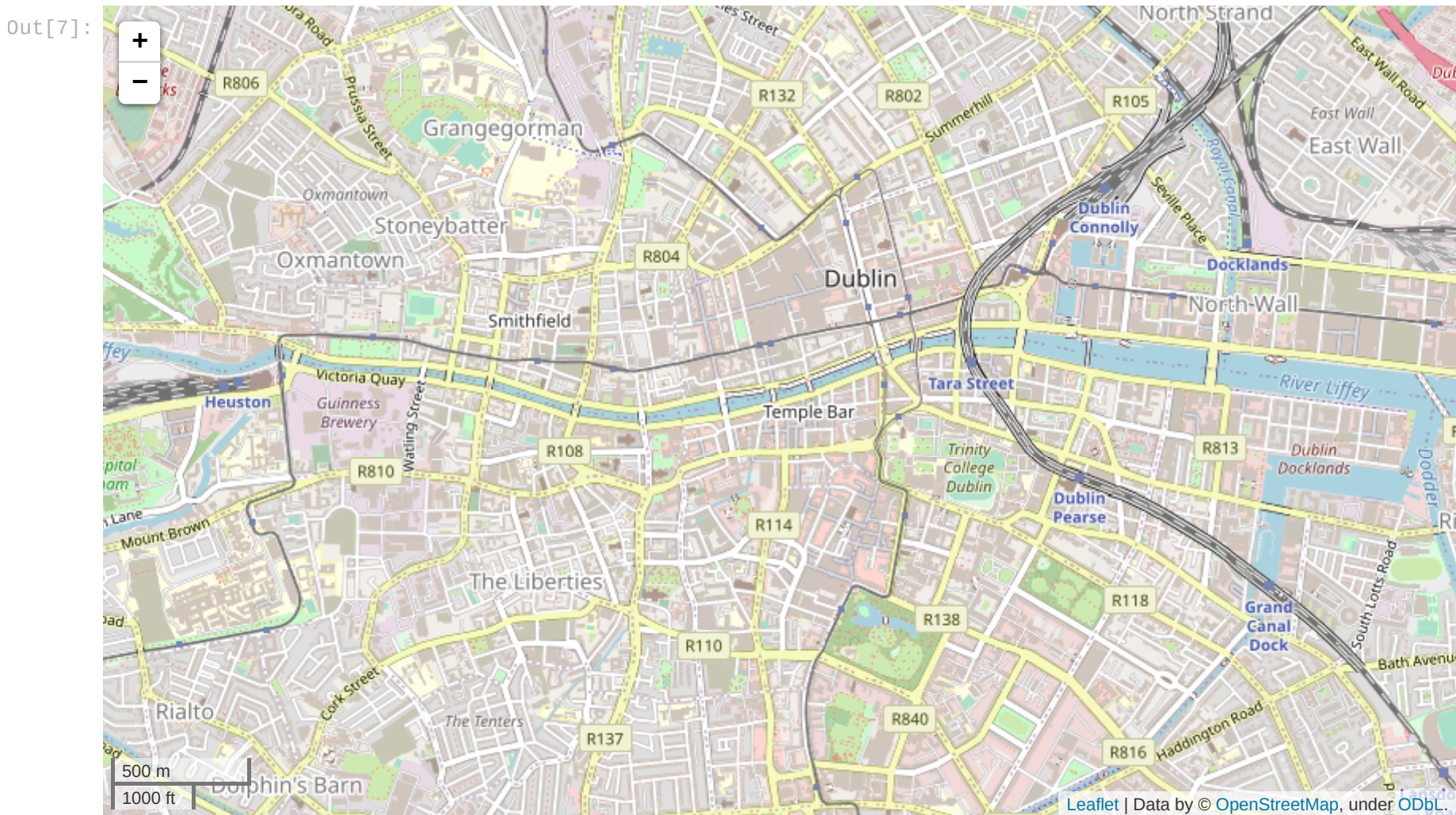
	105	39	WILTON TERRACE	Wilton Terrace	53.332383	-6.252717
	106	83	EMMET ROAD	Emmet Road	53.340714	-6.308191
	107	92	HEUSTON BRIDGE (NORTH)	Heuston Bridge (North)	53.347802	-6.292432
	108	21	LEINSTER STREET SOUTH	Leinster Street South	53.342180	-6.254485
	109	88	BLACKHALL PLACE	Blackhall Place	53.348800	-6.281637

```
In [5]: # Creamos un avariable la localización de las estaciones:

bike_station_locations = bike_station_locations[["Latitude", "Longitude", "Name"]]
```

[illegible]

```
In [7]: # Mostramos el área donde se encuentran las estaciones
mapa
```



```
In [8]: # Añadimos los puntos de cada una de las estaciones en el mapa:

for index, location_info in bike_station_locations.iterrows():
    folium.Marker([location_info["Latitude"],
                    location_info["Longitude"]],
                  popup=location_info["Name"]).add_to(mapa)
```

```
In [9]: # Visualizamos de nuevo el mapa completo:
        mapa
```



Otro ejemplo: Choropleth maps

```

In [10]: url = (
    "https://raw.githubusercontent.com/python-visualization/folium/master/examples/data"
)
state_geo = f"{url}/us-states.json"
state_unemployment = f"{url}/US_Unemployment_Oct2012.csv"
state_data = pd.read_csv(state_unemployment)

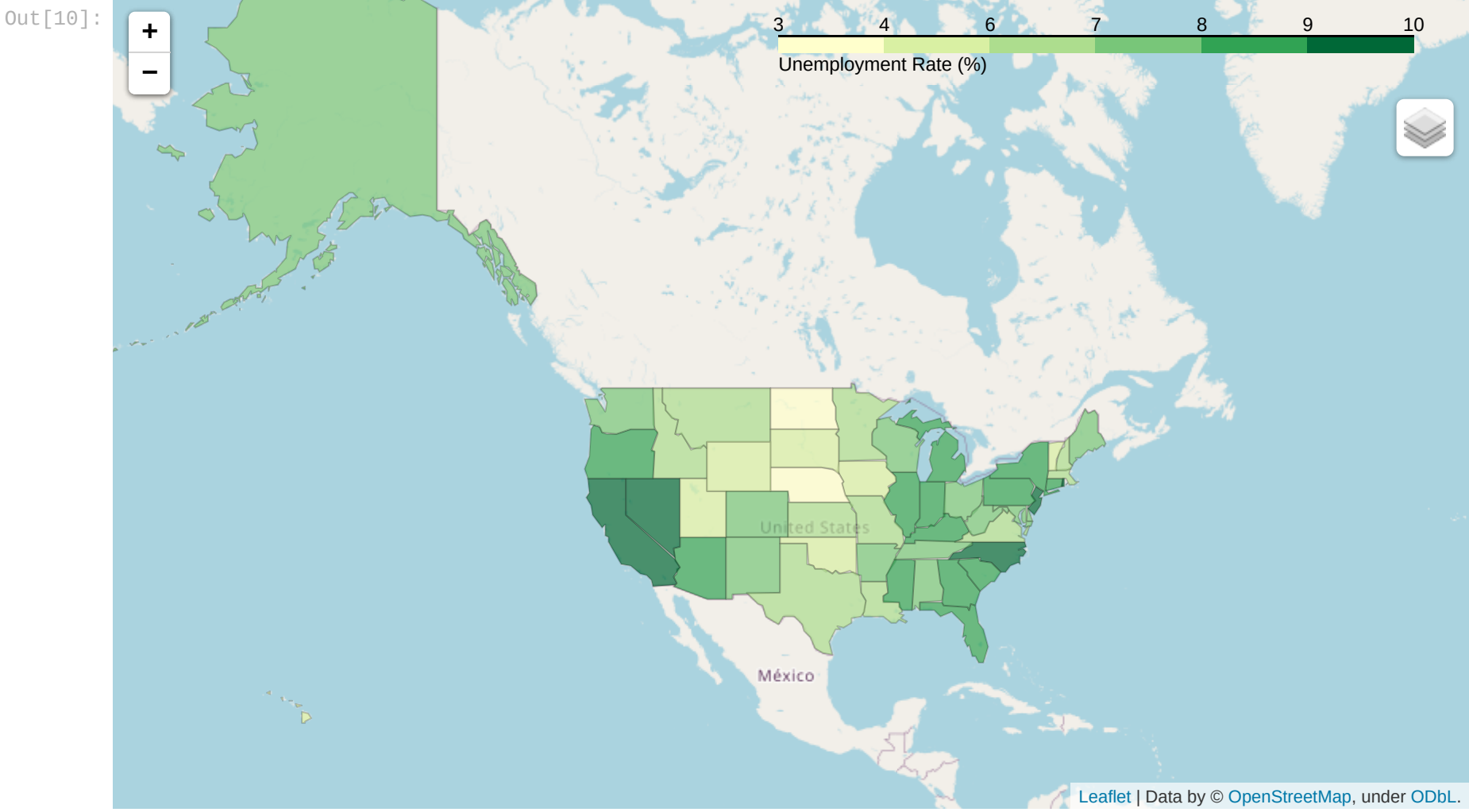
m = folium.Map(location=[48, -102], zoom_start=3)

folium.Choropleth(
    geo_data=state_geo,
    name="choropleth",
    data=state_data,
    columns=["State", "Unemployment"],
    key_on="feature.id",
    fill_color="YlGn",
    fill_opacity=0.7,
    line_opacity=0.2,
    legend_name="Unemployment Rate (%)",
).add_to(m)

folium.LayerControl().add_to(m)

m

```



Creado por:

Isabel Maniega