

# My First Spatial Data Science Notebook

**Student Code:** [123456789 **Date:** 23 July **Course:** Spatial Data Science with Python

```
In [2]: # Let's test that our libraries work!
import datetime
import platform
import os

print("=" * 50)
print("INSTALLATION VERIFICATION")
print("=" * 50)
print(f>Date and Time: {datetime.datetime.now()})
print(f>Student working on: {platform.system()} {platform.release()})
print(f>Computer name: {platform.node()})
print(f>Python location: {os.path.dirname(os.__file__)})
print("=" * 50)

print("Hello, Spatial Data Science!")
print("Testing our Python installation...")

# Import some basic libraries
import pandas as pd
import numpy as np

print(f>✅ Pandas version: {pd.__version__})
print(f>✅ NumPy version: {np.__version__})
print(f>✅ Basic libraries are working!")

=====
INSTALLATION VERIFICATION
=====
Date and Time: 2025-07-23 12:52:25.724156
Student working on: Darwin 24.5.0
Computer name: MAC-ATI0769
Python location: /Users/fbenitez/opt/anaconda3/envs/gg3209/lib/python3.10
=====
Hello, Spatial Data Science!
Testing our Python installation...
✅ Pandas version: 2.3.1
✅ NumPy version: 1.26.4
✅ Basic libraries are working!
```

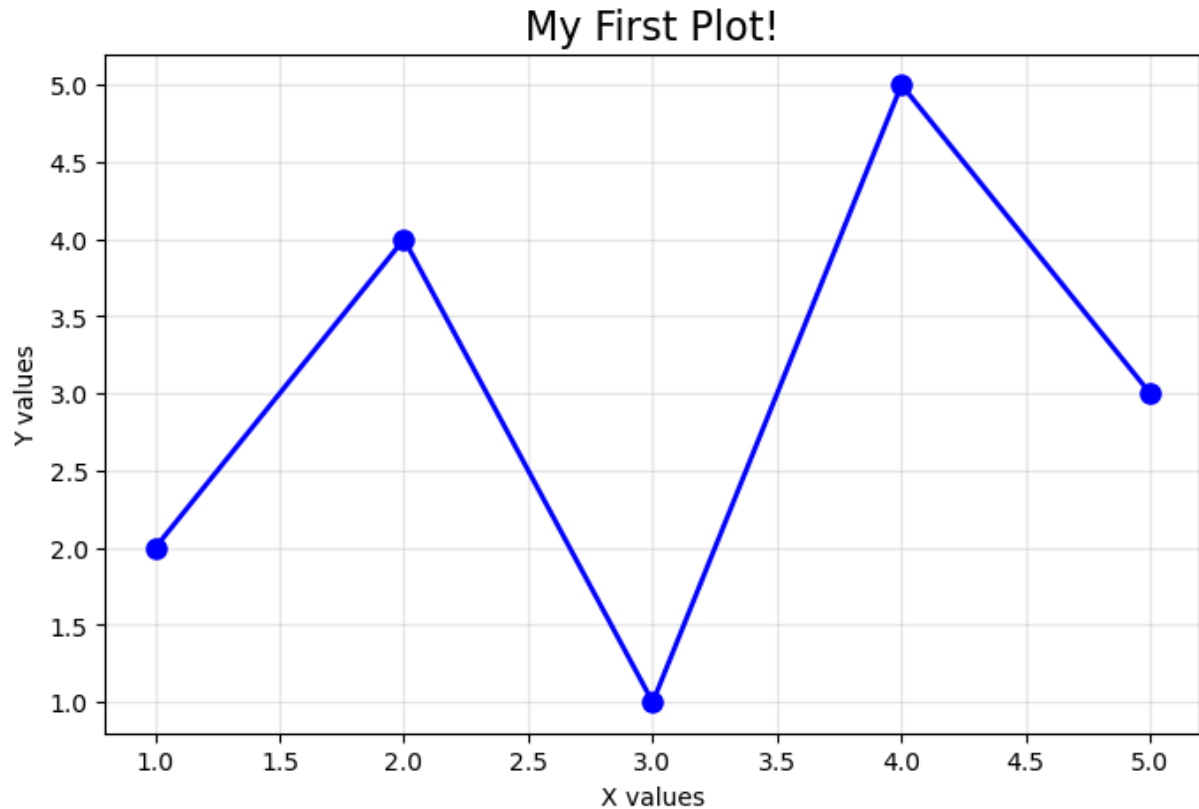
```
In [3]: # Let's test plotting
import matplotlib.pyplot as plt

# Create a simple plot
x = [1, 2, 3, 4, 5]
y = [2, 4, 1, 5, 3]

plt.figure(figsize=(8, 5))
plt.plot(x, y, 'bo-', linewidth=2, markersize=8)
```

```
plt.title("My First Plot!", fontsize=16)
plt.xlabel("X values")
plt.ylabel("Y values")
plt.grid(True, alpha=0.3)
plt.show()
```

```
print("✅ Plotting is working!")
```



✅ Plotting is working!

In [4]: *# Test spatial libraries*

```
try:
    import geopandas as gpd
    print(f"✅ GeoPandas version: {gpd.__version__}")
    print("✅ Spatial data tools are ready!")
except ImportError:
    print("❌ GeoPandas not found – please check your installation")

try:
    import folium
    print(f"✅ Folium version: {folium.__version__}")
    print("✅ Interactive maps are ready!")
except ImportError:
    print("❌ Folium not found – please check your installation")
```

- ✅ GeoPandas version: 1.1.1
- ✅ Spatial data tools are ready!
- ✅ Folium version: 0.20.0
- ✅ Interactive maps are ready!