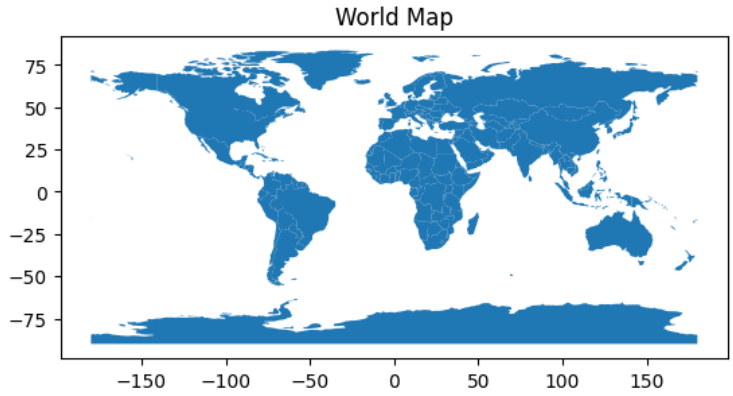
Program : Geospatial Data Visualization with Geopandas: Use geospatial data and create maps using the Geopandas library. Load geographic data, performing spatial analysis, and generating maps.

```
import geopandas as gpd
import matplotlib.pyplot as plt
# Load geographic data (shapefile)
world = gpd.read_file(gpd.datasets.get_path('naturalearth_lowres'))
# Display basic information about the data
print(world.head())
# Plot the map
world.plot()
plt.title('World Map')
plt.show()
```

```
<ipython-input-2-4f6afb04715f>:4: FutureWarning: The geopandas.dataset module is deprecated and will be removed in GeoPandas 1.0.
  world = gpd.read_file(gpd.datasets.get_path('naturalearth_lowres'))
      pop_est      continent                      name iso_a3  gdp_md_est  \
0     889953.0        Oceania                      Fiji    FJI        5496
1   58005463.0         Africa                  Tanzania    TZA       63177
2     603253.0         Africa                W. Sahara    ESH         907
3   37589262.0  North America                    Canada    CAN     1736425
4  328239523.0  North America  United States of America    USA    21433226

                                            geometry
0  MULTIPOLYGON (((180.00000 -16.06713, 180.00000...
1  POLYGON ((33.90371 -0.95000, 34.07262 -1.05982...
2  POLYGON ((-8.66559 27.65643, -8.66512 27.58948...
3  MULTIPOLYGON (((-122.84000 49.00000, -122.9742...
4  MULTIPOLYGON (((-122.84000 49.00000, -120.0000...
```



Conclusion: In this program, we utilized the Geopandas library to visualize geospatial data by loading a shapefile representing the world map. The data was loaded successfully and basic information about the dataset was displayed, providing insights into its structure. By plotting the map using Geopandas' built-in plotting function, we were able to generate a visualization of the world map. This demonstrates the capability of Geopandas to handle geospatial data and create maps efficiently. Geospatial data visualization plays a crucial role in various domains such as urban planning, environmental studies, and geodemographic analysis, allowing stakeholders to gain insights from geographic patterns and spatial relationships. Overall, Geopandas offers a powerful toolset for geospatial analysis and visualization, enabling users to explore and interpret geographic data effectively.