import geopandas as gpd﻿import matplotlib.pyplot as plt﻿from shapely.geometry import Polygon﻿polygons = [﻿    Polygon([(0, 0), (2, 0), (2, 2), (0, 2)]),﻿    Polygon([(3, 0), (5, 0), (5, 2), (3, 2)]),﻿    Polygon([(0, 3), (2, 3), (2, 5), (0, 5)]),﻿    Polygon([(3, 3), (5, 3), (5, 5), (3, 5)])﻿]﻿land\_uses = ['Residential', 'Commercial', 'Residential', 'Industrial']﻿gdf = gpd.GeoDataFrame({'land\_use': land\_uses, 'geometry': polygons})﻿print("Available land use categories:", gdf['land\_use'].unique())﻿residential = gdf[gdf['land\_use'].str.lower() == 'residential']﻿if residential.empty:﻿    print("No residential zones found.")﻿else:﻿    # Plot the residential zones﻿    fig, ax = plt.subplots(figsize=(6, 6))﻿    residential.plot(ax=ax, color='lightblue', edgecolor='black')﻿    ax.set\_title("Residential Zones in Urban Area", fontsize=15)﻿    ax.axis('off')﻿    plt.show()