import matplotlib.pyplot as plt﻿import numpy as np﻿population\_density = np.array([1000, 3000, 5000, 7000, 9000])﻿green\_space = np.array([5.0, 3.5, 2.5, 1.8, 1.0])﻿required\_green\_space = (9 \* population\_density) / 1\_000\_000﻿plt.figure(figsize=(8, 5))﻿plt.plot(population\_density, green\_space, label="Current Green Space", marker='o')﻿plt.plot(population\_density, required\_green\_space, label="Required Green Space", marker='x')﻿plt.title("Green Space Needs vs Population Density")﻿plt.xlabel("Population Density (people/sq km)")﻿plt.ylabel("Green Space (sq km)")﻿plt.legend()﻿plt.grid(True)﻿# Save the plot image﻿output\_plot\_path = "/mnt/data/Green\_Space\_Prediction.png"﻿plt.savefig(output\_plot\_path)