2/20/24, 9:36 PM 2347240\_lab2

```
In []: import geopandas as gpd import pandas as pd import matplotlib.pyplot as plt

shapefile_path = "TAMIL+NADU_DISTRICTS/TAMIL NADU_DISTRICTS.shp" map_df = gpd.read_file(shapefile_path)

data_path = "covid_data.csv" data_df = pd.read_csv(data_path)

merged_df = map_df.set_index('dtname').join(data_df.set_index('District'))

fig, ax = plt.subplots(1, 1, figsize=(15, 10)) ax.set_title('Persons under Treatment including Home Treatment as on 24.06.2022')

merged_df.plot(column='Persons under Treatment including Home Treatment as on 24.06

for idx, row in merged_df.iterrows():
    centroid = row['geometry'].centroid
    ax.text(centroid.x, centroid.y, row.name, ha='center', fontsize=8, color='black plt.show()
```

2/20/24, 9:36 PM 2347240\_lab2

