

## Ex. No:7      Visualizing Geographic Data with Basemap

### Program:-

```
import matplotlib.pyplot as plt
import geopandas
from shapely.geometry import Polygon
df = pd.read_excel('state_wise_crimes.xlsx')
fp = "Igismap/Indian_States.shp"
map_df = gpd.read_file(fp)

merged = map_df.set_index('st_nm').join(data_for_map.set_index('state_name'))
merged.head()

fig, ax = plt.subplots(1, figsize=(10, 6))
ax.axis('off')

ax.set_title('State Wise Crime against women in India in 2015',
fontdict={'fontsize': '25', 'fontweight' : '3'})

merged.plot(column='Total Crimes against Women', cmap='YlOrRd',
linewidth=0.8, ax=ax, edgecolor='0.8', legend=True)
```

output:-

