This script calculates the **population-weighted average burglary risk** for each electoral ward in London. It combines three key datasets:

1. **Predicted burglary risk per LSOA** (Lower Layer Super Output Area),
2. A **mapping from LSOAs to wards**, and
3. **Population estimates per LSOA** from the UK Office for National Statistics.

The process involves:

* Merging all datasets on the shared LSOA code,
* Multiplying each LSOA's predicted risk score by its population to weight the importance of that risk,
* Aggregating these weighted scores to the ward level,
* Dividing the total weighted risk by the total ward population to get a **population-adjusted average risk**.

The result is a table that shows which wards face the highest predicted risk of residential burglary in 2025 **per resident**, which is ideal for guiding fair and effective police resource allocation.

This approach ensures that wards with both high predicted crime and large populations receive more attention, aligning with the project's goal of data-driven and equitable policing.