

## Pandas Assignment 4

### (Groupby)

Note: Case study -> 3 (Housing Data)

Dataset:

<https://www.kaggle.com/datasets/yasserh/housing-prices-dataset>

Q1. Write a program to find the average price of houses grouped by the number of bedrooms. Display the result in descending order of average price.

Q2. Create a program to calculate the total area of houses grouped by zip code. Display only the top 5 zip codes with the largest total area.

Q3. Determine the median price of houses based on whether they are located near water or not. Display the result with each waterfront status.

Q4. Add a column named PricePerSqFt to calculate the price per square foot for each house. Group the dataset by the number of floors and find the average PricePerSqFt for each group.

Q5. Group the data by zip code and count the total number of houses in each zip code. Display the zip codes with the top 10 highest counts.

Q6. Write a program to group houses based on the number of bathrooms and find the minimum, maximum, and average area (square feet) for each bathroom group. Display the results sorted by the number of bathrooms.

Q7. For houses built after the year 2000, calculate the average and maximum price grouped by the number of bedrooms. Display the result with each bedroom count.

Q8. Calculate the average number of floors for houses located near water. Group by waterfront status and display the average number of floors for each group.

