Crack the Case

Round 1 Problem Statement

Refer to the dataset and answer the following questions. You can use either Python or SQL to answer the questions:
Dataset link: Bengaluru_House_pricing.csv

For All Years

1. How many rows and columns are present in the dataset?
2. Which area_type appears most frequently in the dataset?
3. Calculate the average price of properties in the dataset.
4. List the top 10 locations with the highest number of property listings.
5. What is the average price for each BHK category in the dataset?
6. How many properties have more bathrooms than bedrooms? Provide the top 3 locations where this occurs most.
7. How many properties have a total_sqft less than 600? Also list the top 5 locations where such properties exist.
8. Determine the percentage share of 2 BHK and 3 BHK properties per location. Which location has the highest share of 3 BHK homes?

For 2nd and 3rd Year ONLY

9. Create a new column “price_per_sqft” and find the top 5 and bottom 5 locations with the highest and lowest ₹/sqft values.
10. Detect extreme outliers in price_per_sqft within each location using a statistical rule (any valid approach allowed).

11. Identify the most affordable and the most expensive location (based on median price_per_sqft).

12. Compare the average price_per_sqft of properties with 1 balcony vs 2 or more balconies. Which category appears more premium?

Instructions

1. For 1st Years they have to attempt Question no. 1 to Question no. 8 ONLY.
2. For 2nd and 3rd Years, they have to attempt ALL the questions from Question no. 1 to Question no. 12.
3. Submit only one PDF file containing all answers, code, and results.
4. Python/SQL scripts must be included as text in the PDF — no separate files allowed.
5. Use clear question-wise formatting with proper code comments.
6. Final outputs/results must be visible within the PDF (not just code).
7. Late or multiple submissions will not be accepted.
8. Any plagiarism will lead to immediate disqualification.

In case of any query contact:

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