

## Introduction

The provided dataset contains information taken from Zameen.com, which is a Pakistani realestate website. It contains data about properties from all over Pakistan, such as area, location, property type, etc. The website is easy to navigate, and anyone willing to sell or buy property can find their ideal homes on this website.

## **Data Processing Steps**

- 1- Firstly, I checked the data for duplicates by using the "remove duplicates" option on the "data" tab. (no duplicates found)
- 2- After, I checked if the variables made sense.
- 3- Then, I checked for any missing values in all columns by clicking the "filter" option and clicking the drop-down arrow box and scrolling through it. (no missing values)
- 4- I added "pkr" in the price variable cell
- 5- In the numerical columns, I checked for any extra spaces through the "find and replace" option and replaced spaces with nothing.

## **Answers**

- <u>Q1</u>- There are 105453 House property type in the data. I went to data, filter, then chose "house" from the property type column dropdown
- **Q2** The range is 1000-9500000. The smallest value is 1000 and largest is 9500000. I went to data, filtered the columns for location and purpose, then arranged the price column in ascending then descending order.
- **Q3** 7 different types of property are listed on zameen.com. I went to data, filter, then counted types from the dropdown on the property types column.
- <u>Q4</u>- There are 64689 properties with more than 3 bedrooms. I went to data, filter, then unchecked properties with bedrooms less than 3 from the dropdown on the property types column
- **Q5** There are 601 farm house properties added in 2019. I filtered the "property type" column to show farm house only and the "data added column" to show 2019 only.
- <u>Q6-</u> 1 Flat is available for Sale with exactly 2 bathrooms in Faisalabad. I filtered these variable columns.

- **Q7** First, I created the new column. Then, I used the if function, =AND( M2 > "3", (D2 > "10,000,000" )).
- **Q8** I created a new column, then I used the nested if function. =IF(OR( F2= "Islamabad", (F2= "Lahore")), "yes", IF(J2 > "4", "yes", IF(M2 > "4", "yes", "no")))
- $\underline{\mathbf{O9}}$  I created a new column, then I used this formula =AND(N2= "2023", (D2 > "15,000,000")).
- **Q10** The maximum area for farm houses is 90 kanal. I filtered the "property type" column to show farm houses. Then arranged the "Area" column from z-a order.
- <u>Q11</u>- The most expensive property is located in Mall Road, Lahore at 2000000000. I arranged the data in the "price" column from largest to smallest.
- $\underline{\mathbf{O12}}$  5 properties are for sale in 7<sup>th</sup> Avenue, Islamabad. I filtered the data in these 3 columns to get the answer.