**ANALYSIS – 2 SUMMARY**

**Number of Vehicles by Brand:**

* Conducted an analysis to determine the count of vehicles available for sale by brand.
* Utilized the value\_counts method to extract brand-wise counts.
* Visualized the data using a count plot, representing each brand's availability as bars.

**Average Price Analysis by Vehicle Type and Gearbox:**

* Employed the groupby method to calculate the average price for each combination of vehicle type and gearbox.
* Presented the results through a bar plot, displaying the mean prices for different vehicle types and gearboxes.

**Marginal Probability of Private Sellers:**

* Investigated the marginal probability of sellers being "private" by cross-tabulating the "seller" column against different seller types.
* Utilized the **pd.crosstab** function with normalization to assess the probability.
* Found that the marginal probability of a private seller is approximately 0.999992.

In summary, this analysis provided insights into the distribution of vehicles by brand, average prices based on vehicle type and gearbox, and the marginal probability of private sellers on eBay. The combination of numerical and visualization analyses enhanced the understanding of key aspects in the dataset.