**Summary**

**Analysis-2:**

1. **No of Vehicles by Brand Available on eBay:**

* The no of vehicles by brand available on eBay gives the information of no of vehicles available in different brands on eBay for sale.
* For visualization, you can create count plot (or) histogram plot to visualize the number of vehicles by brand available on eBay.
* The y-axis represents the different brands of vehicles, and x-axis represents the count of vehicles that are registered from different brand for sale.
* Out of all brands available, Volkswagen brand has highest no of vehicles

79639, by brand available on eBay for sale.

* Lada brand has lowest no of vehicles 225, by brand available on eBay for sale.

1. **Average Price for Vehicles Based on the Type of Vehicle as Well as Type of Gearbox:**

* Average price for vehicles based on the vehicle type and gearbox type provides insights about average price for vehicle type and gearbox both at a time.
* We can get the average price for both at a time by using groupby method.
* For visualization, you can create bar plot to visualize the average price for vehicle type and gearbox at a time.
* the x-axis represents the vehicle type and gearbox type, and the y-axis will represent the average price.
* Vehicle type andere and gearbox type manuell has the highest average price 758055.365.
* Vehicle type kleinwagen and gearbox type automatic has the lowest average price 3889.552.

1. **The Marginal Probability for Privat Seller:**

* To get marginal probability for privat seller, we have to access the seller

column.

* Now we have to use crosstab by giving seller column for both index and

column, where rownames as privat and colnames as gewerblich.

* But to know the marginal probability of the privat column we have to use the parameter (margin =True).
* Give normalize= “all” to get the marginal probability.
* So, marginal probability for privat seller is 0.999992.