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Explanatory Data Analyst

Car Selling in Dekkho

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Variable Overview

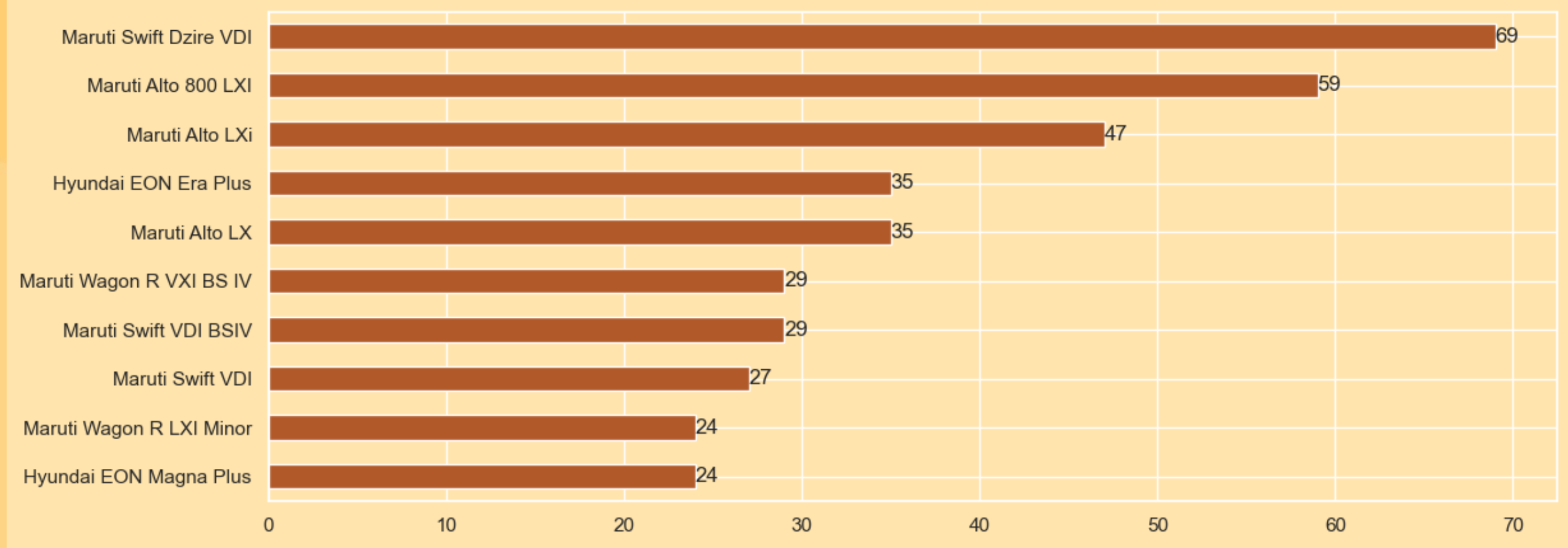
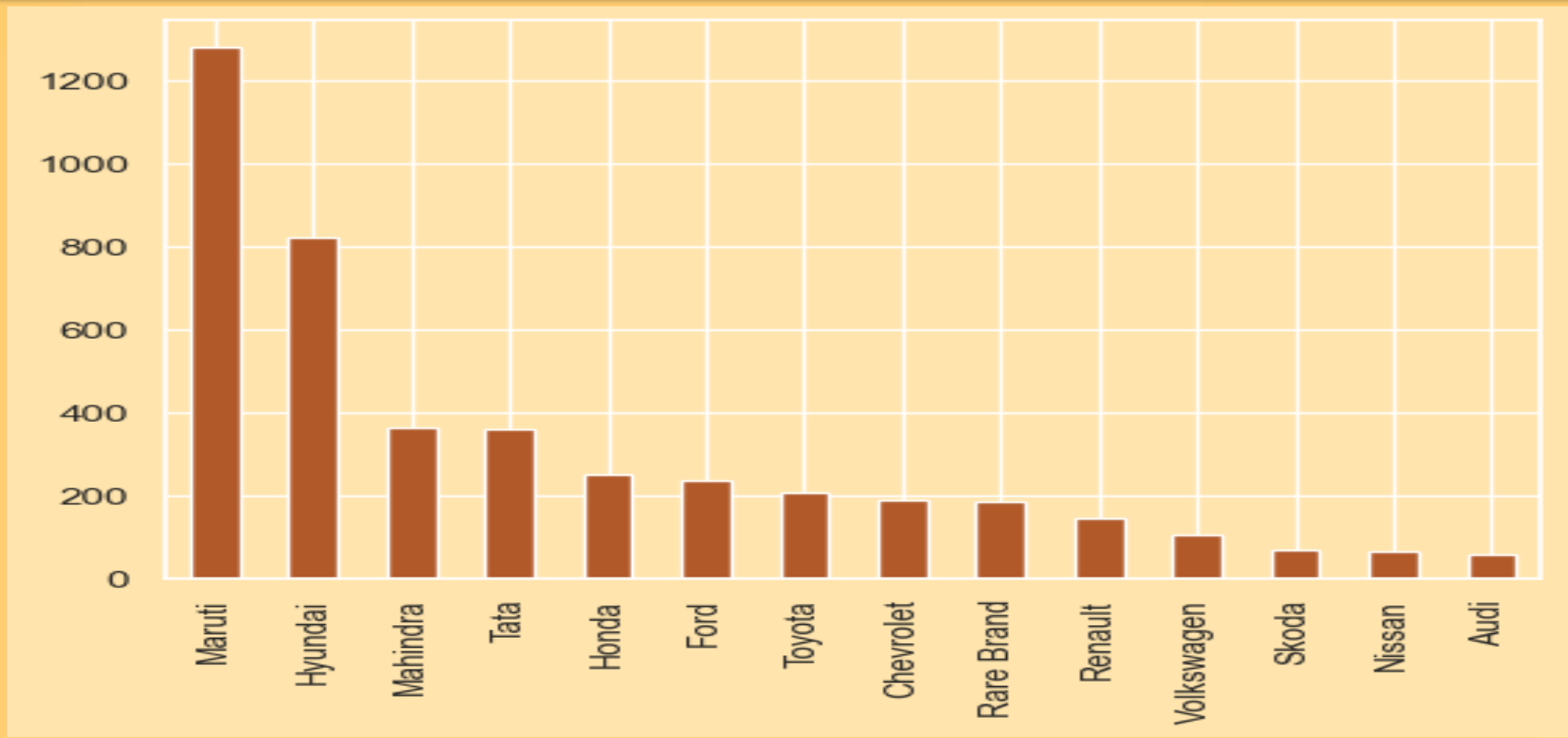


Car Dekho is an Indian auto portal that helps its users with car research, finance, insurance, used cars, and any other aspect of car buying and selling. The company has tie-ups with many auto manufacturers, car dealers, and numerous financial institutions to facilitate the purchase of vehicles.

In this report, we will do data visualization analysis from 2 kinds of variable continue and 6 kinds of variable discrete The details of variables included in the dataset are :

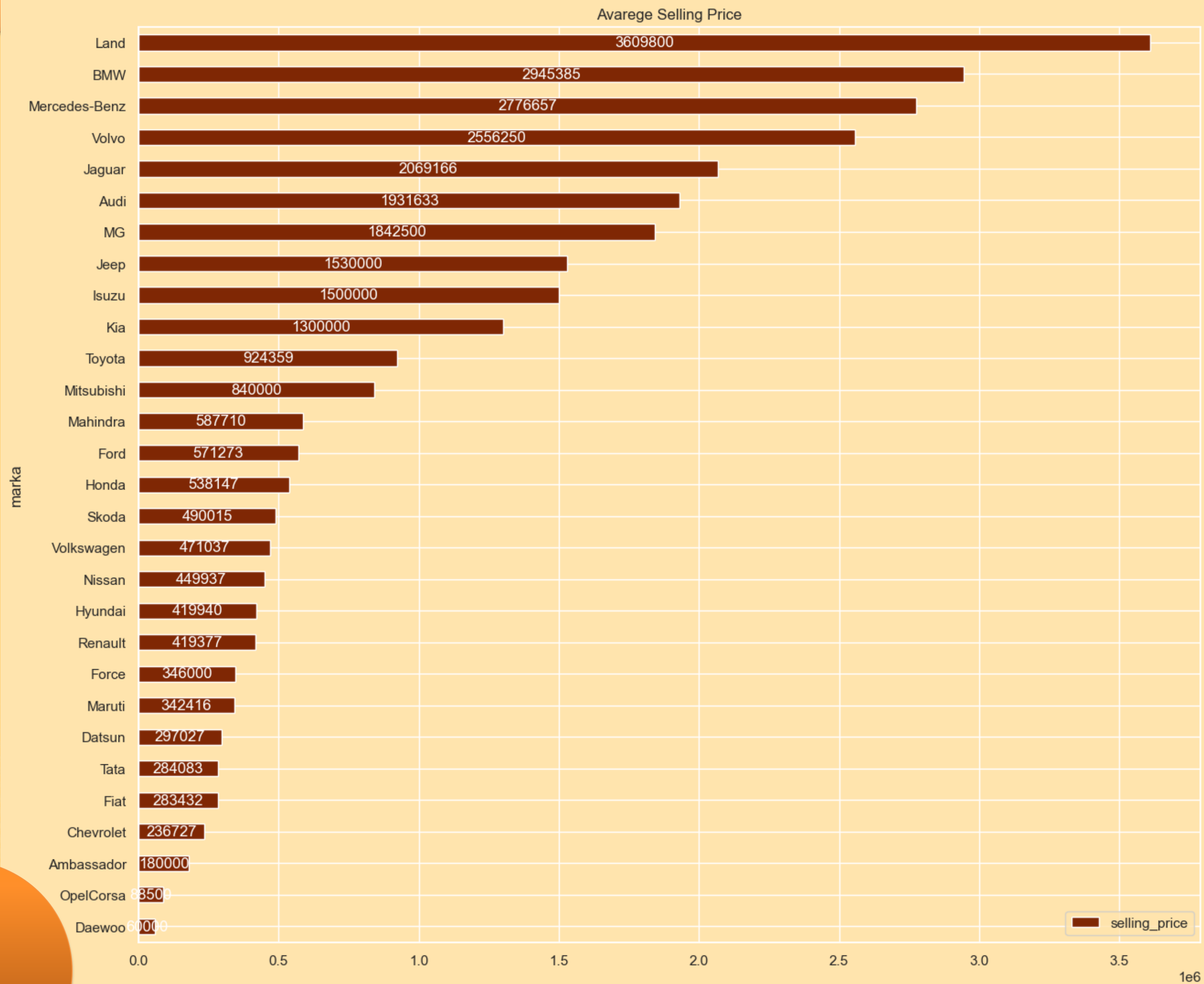
- | | |
|------------------|-----------------|
| 1) Car Name | 5) Fuel |
| 2) Year | 6) Seller type |
| 3) Selling Price | 7) Transmission |
| 4) Kms driven | 8) Owner |

Source of Data : <https://www.kaggle.com/datasets/akshaydattatraykhare/car-details-dataset/code>



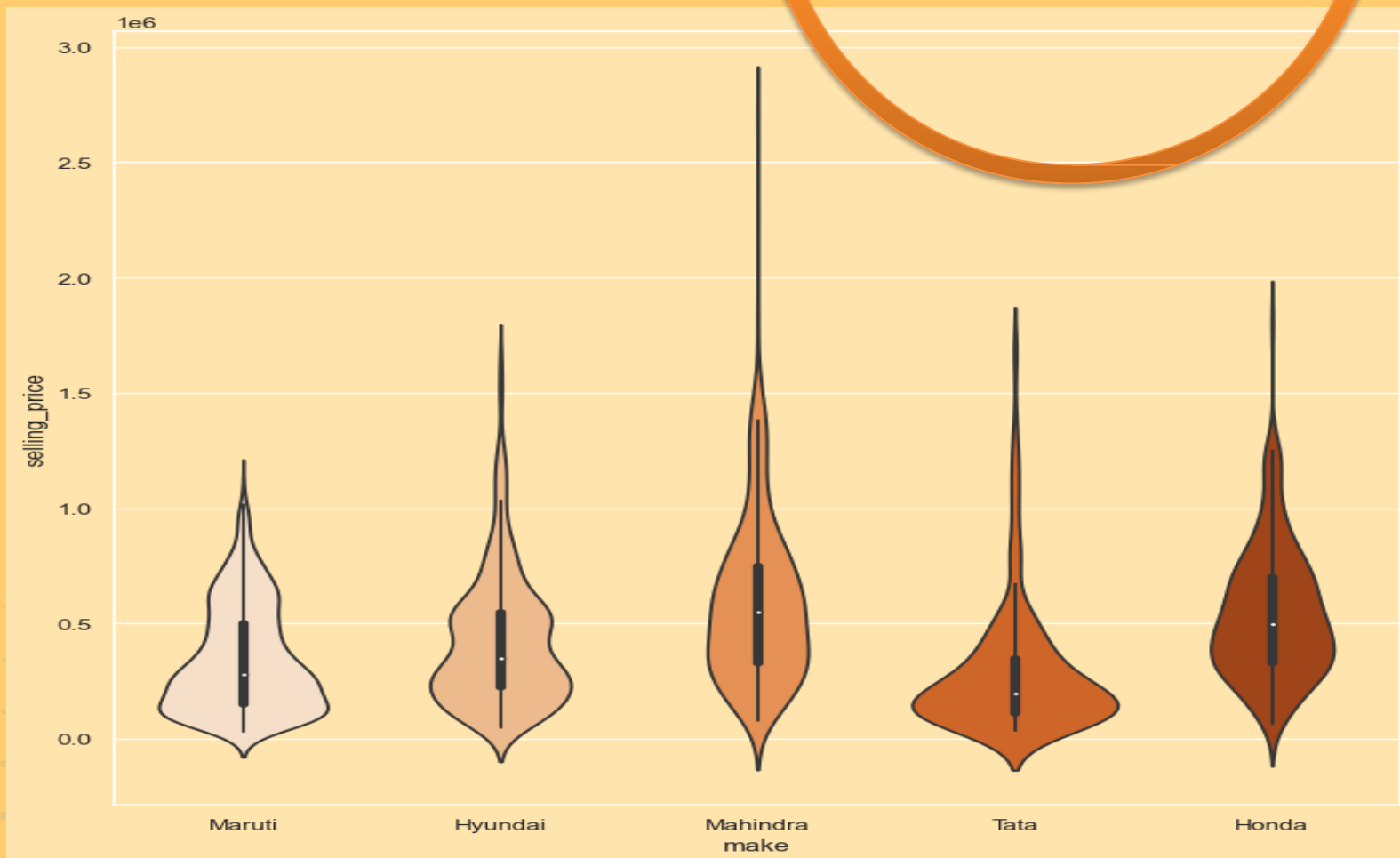
The analysis shows that 2017 was the year when car sales were the highest, but after that, from 2018 to 2020, car sales decreased. The number of years that are almost the same as car sales are in 2014 and 2018

In the picture above, it can be seen that the highest total car sales from the 10-year order with the most car sales were in 2017 with the Maruti brand, specifically, the Maruti car series that was most often sold was the Maruti Swift Dzire VDI, and the second one was the Maruti Swift Dzire VDI. Maruti Alto 800 LXI, the second brand of interest is Hyundai, then followed by Mahindra, it can be seen from the picture that out of the 10 most sold car series brands, Maruti and Hyundai brands

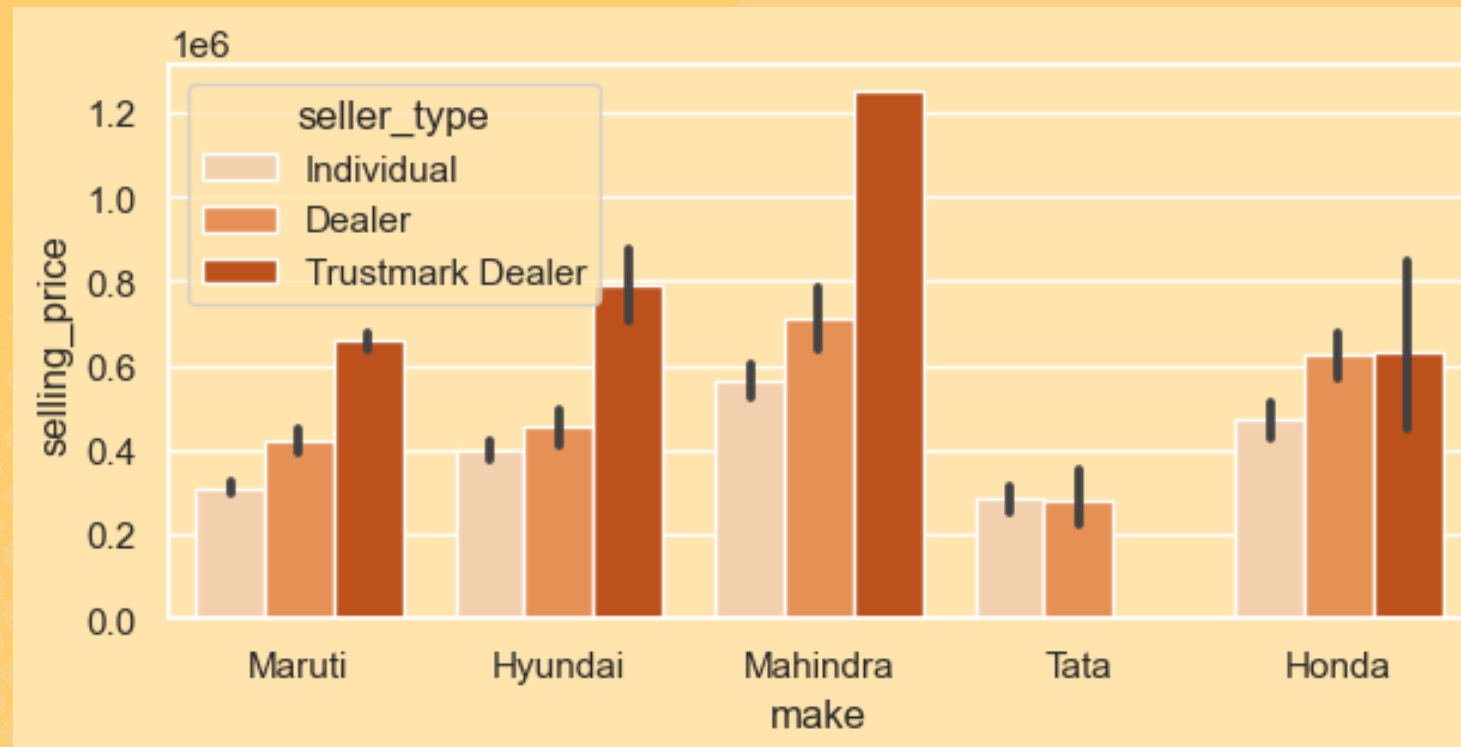
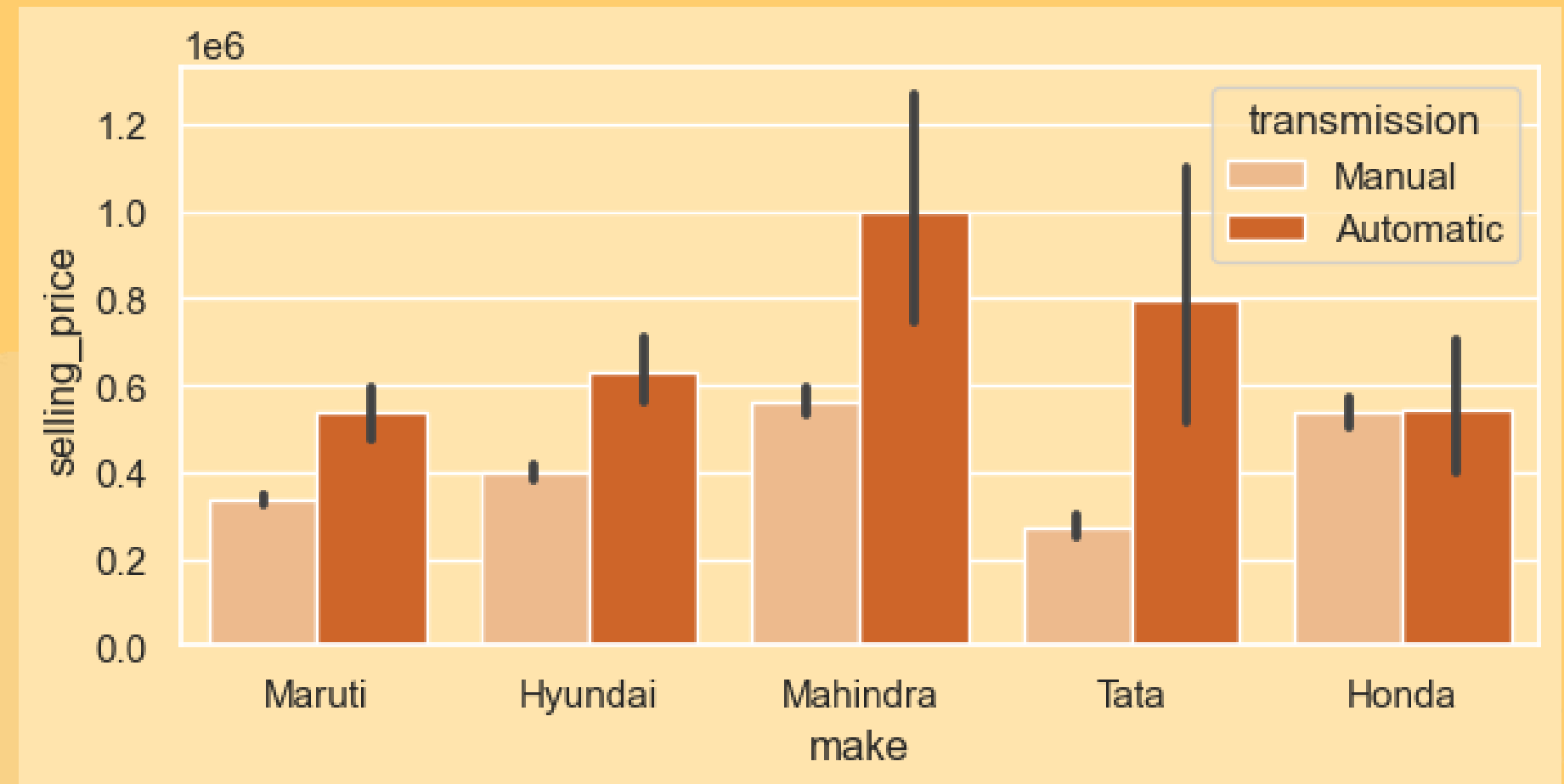


Price of Selling Car

The Bar Chart beside shows that the cars with the highest average selling price are Land brand cars, followed by BMW, Mercedes-Benz, Valvo, and Jaguar brands. The car brands Maruti and Hyundai, which in the previous analysis explained that the two brands are the most frequently sold cars, have a very far price comparison when compared to the five brands that have the highest average price.



Price of Selling Car



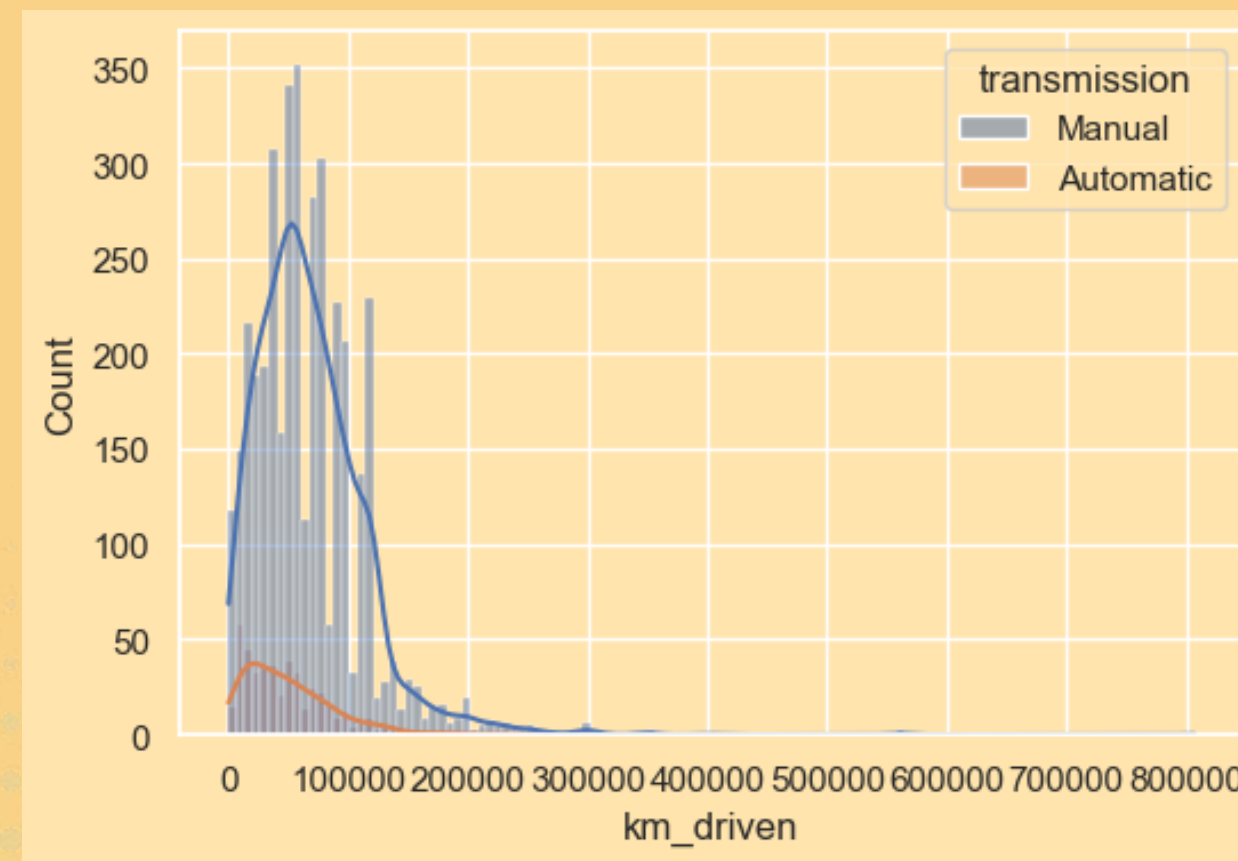
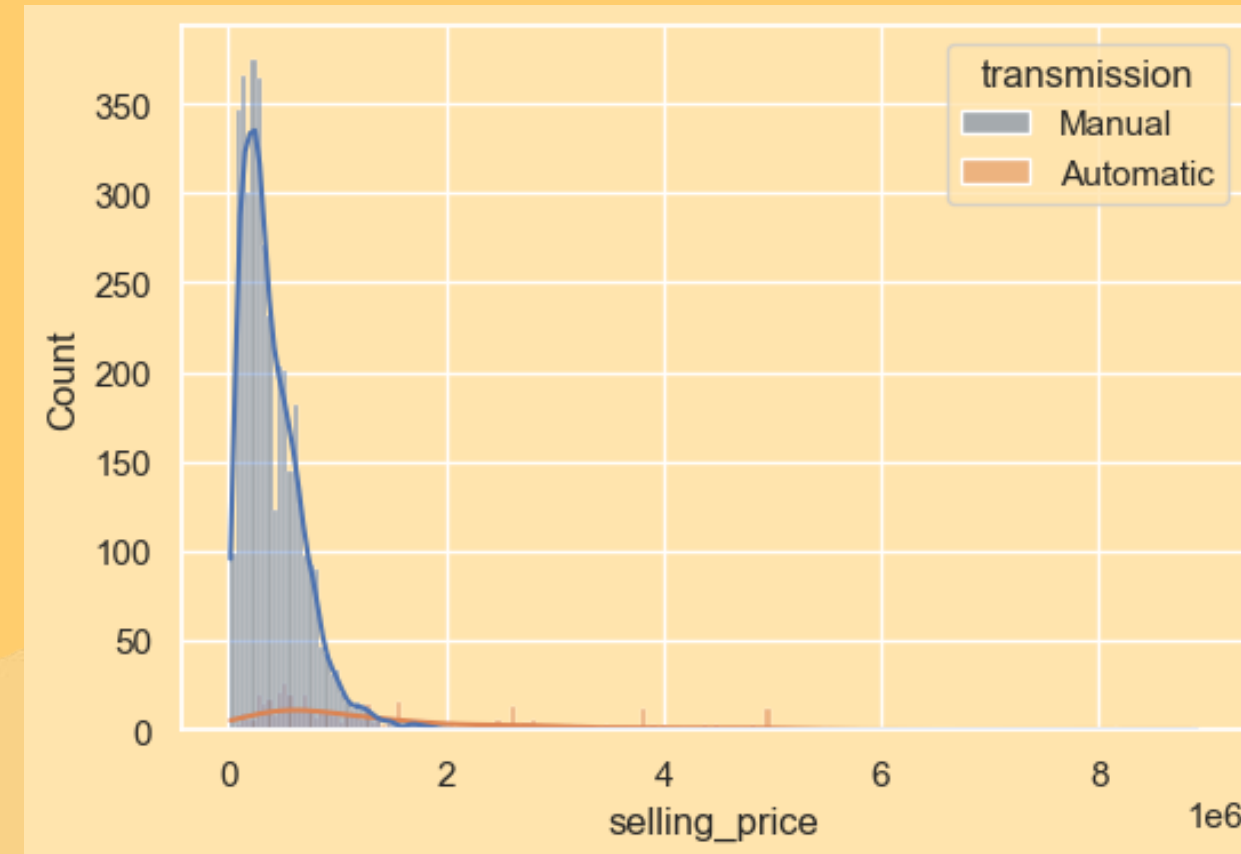
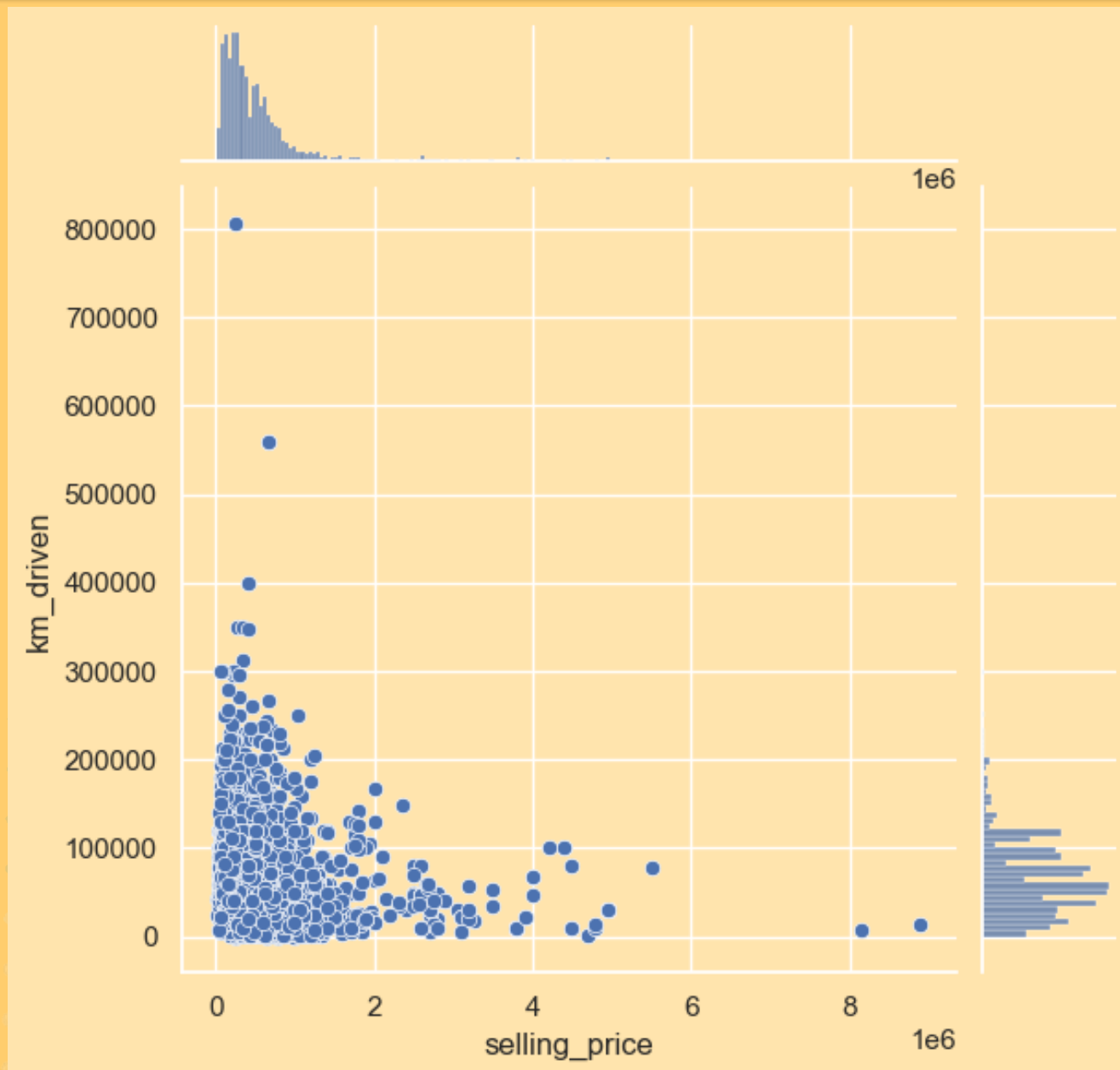
Of the 5 car brands with the highest number of sales, it can be seen that Mahindra cars have a higher selling price than other cars. The box plot form shows that the price of a car usually has an average data which is located to the right of the mode

Top 5 of Car Selling Brand



In the table it can be seen that the sales of cars carried out by the first owner are increasing over time, the sales are even higher even though in 2020 it has decreased, while the sales of cars carried out by the second and third owners have almost the same period, car sales by the third owner and above are mostly carried out in from 1998 to 2013. Meanwhile, the highest car sales conducted by Test Driver were in 2020

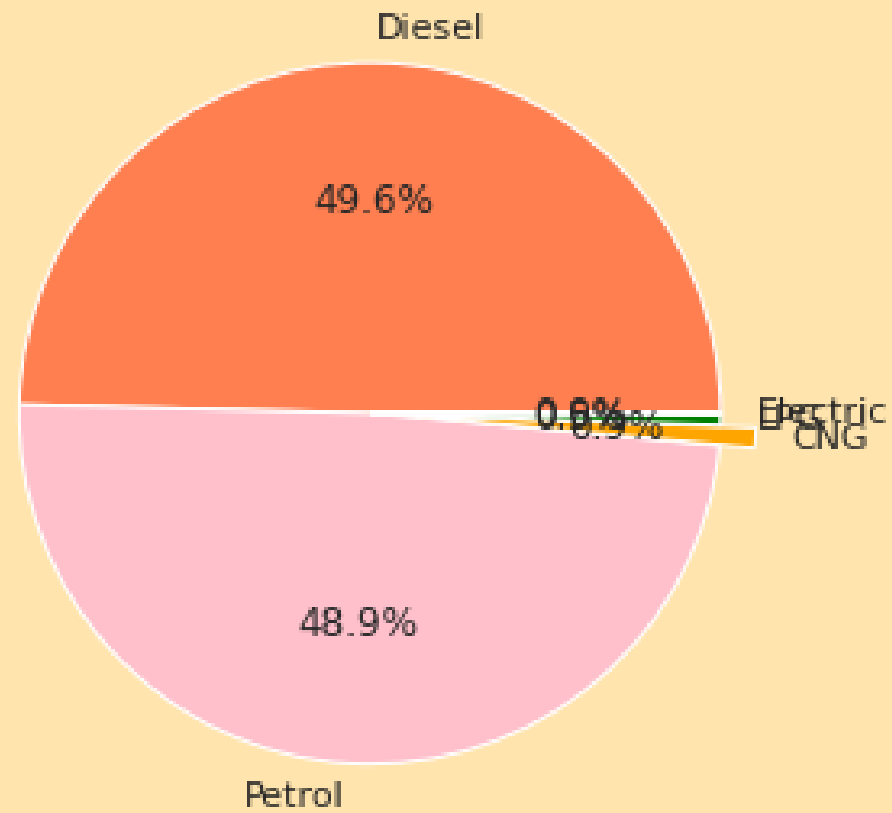
owner year	First Owner	Fourth & Above Owner	Second Owner	Test Drive Car	Third Owner
1992	0	1	0	0	0
1995	0	0	1	0	0
1996	1	0	1	0	0
1997	1	0	1	0	1
1998	0	3	6	0	3
1999	1	3	5	0	1
2000	4	2	4	0	2
2001	5	1	6	0	8
2002	7	3	6	0	5
2003	7	3	11	0	2
2004	13	8	15	0	8
2005	33	2	36	0	14
2006	30	5	51	0	24
2007	41	9	66	0	18
2008	59	4	52	0	30
2009	77	10	74	0	32
2010	91	9	102	0	32
2011	124	4	110	0	33
2012	230	6	148	0	31
2013	260	5	103	0	18
2014	227	2	124	0	14
2015	324	1	78	0	18
2016	305	0	47	0	5
2017	428	1	34	1	2
2018	344	0	20	1	1
2019	185	0	5	3	2
2020	35	1	0	12	0



In the continuous variable analysis, namely **km_driven** and selling price, it can be seen that the data has a positive skewness pattern which means that the data mode is below the value while the average value of the data is above the mode value. In the analysis, it is separated between the selling price and km-driven for cars with Manual and Automatic engine types, in the sales data for manual machines the car has a much higher number than Automatic machines.

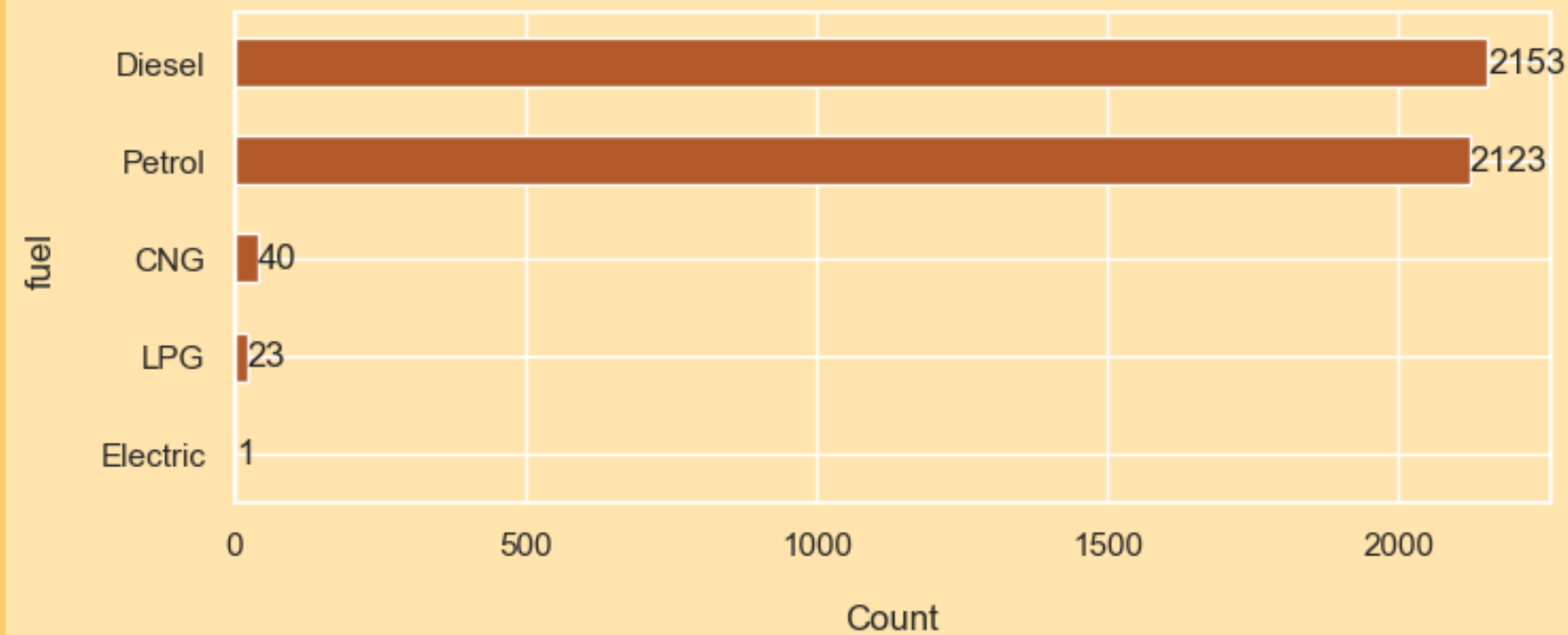


Fuel Presentage

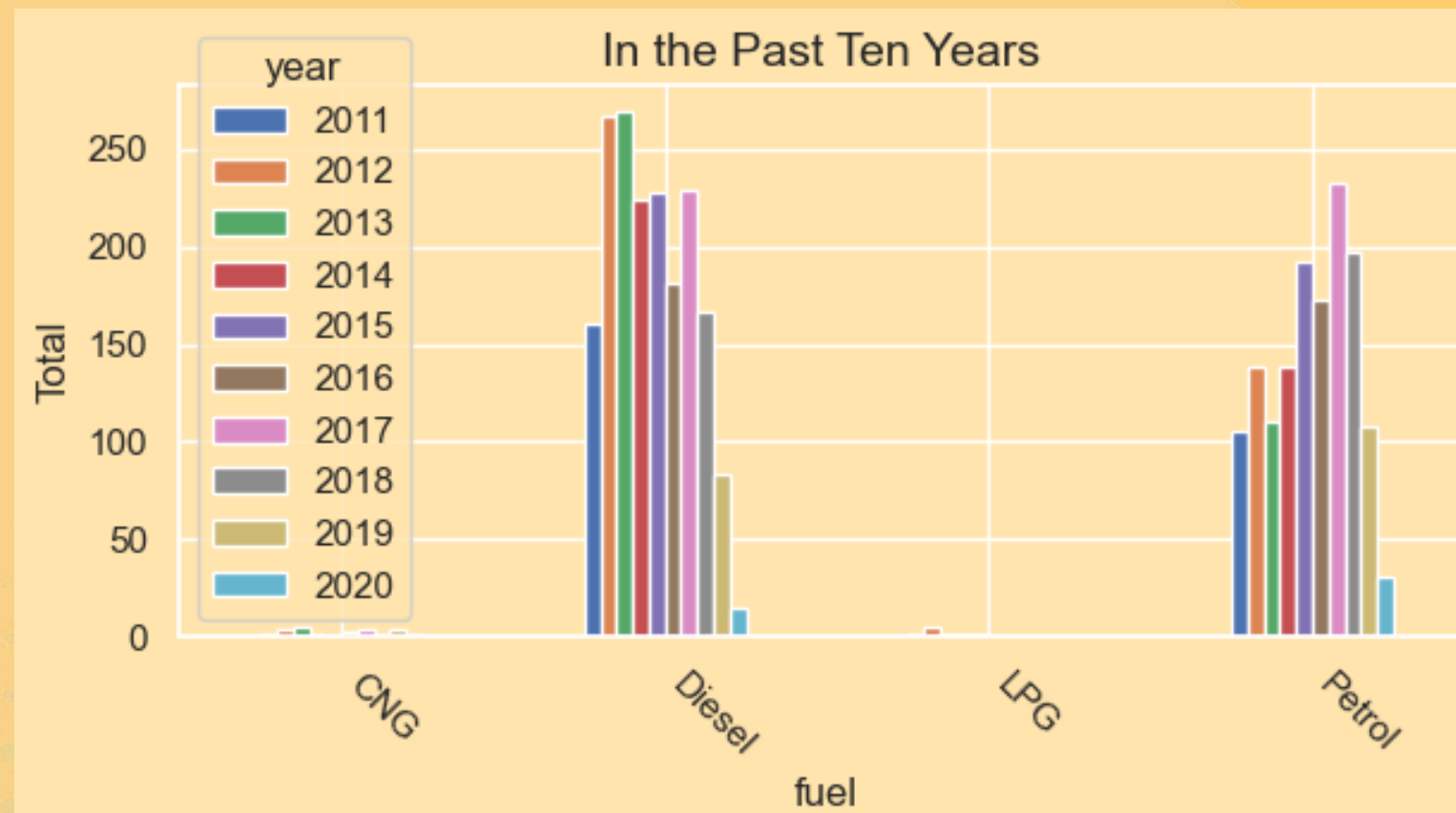
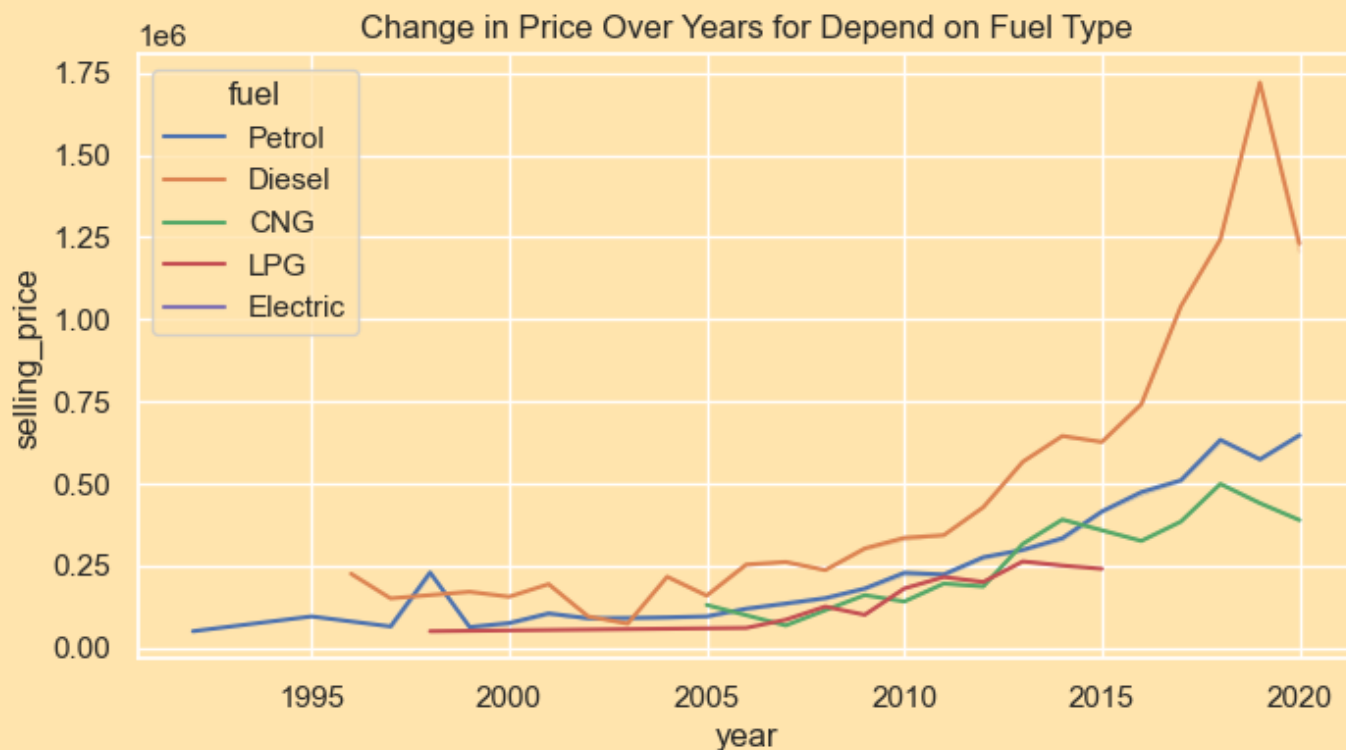


Fuel Type Analyst of Selling Car

Total of Selling Car Depend of Fuel



The results of the analysis show that the most types of cars sold in Dekho cars are dominated by cars with diesel and petrol fuel, cars with CNC and LPG fuel only 40 and 23 cars, even cars with Electric fuel are only 1, from 1995 to 2022 sales of cars with 4 fuels are always increasing, it's just that some have decreased, such as in 2020 sales of cars with Diesel fuel have decreased.

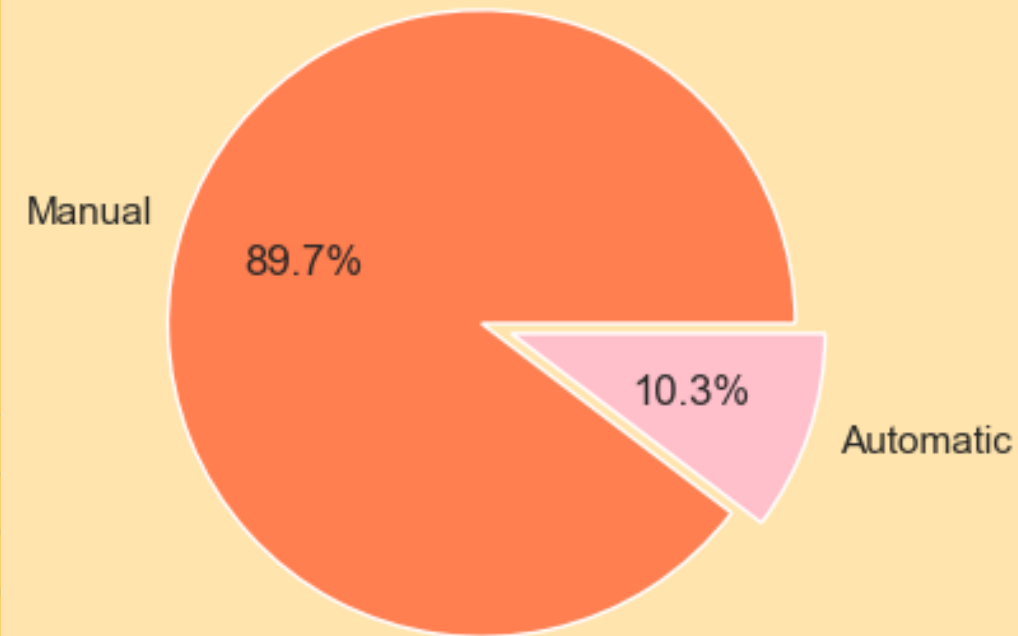


The highest sales of CNC and Diesel fueled cars were in 2013, the lowest sales of Diesel fueled cars were in 2020. For cars with the highest LPG fuel in 2012 and the highest Petrol fuel cars in 2017 while the lowest was in 2020.

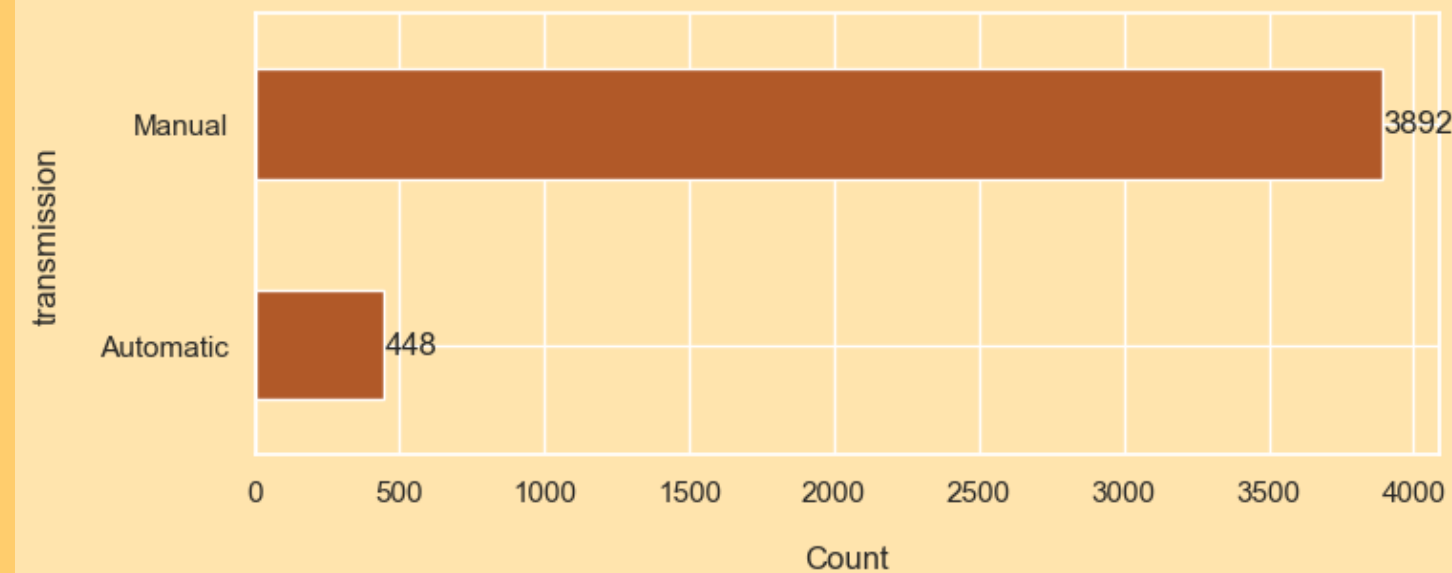
In addition, cars with diesel fuel always have the highest selling price compared to others, and cars with LPG fuel have the lowest selling prices.

Transmission Type Analyst of Selling Car

Transmission Presentage

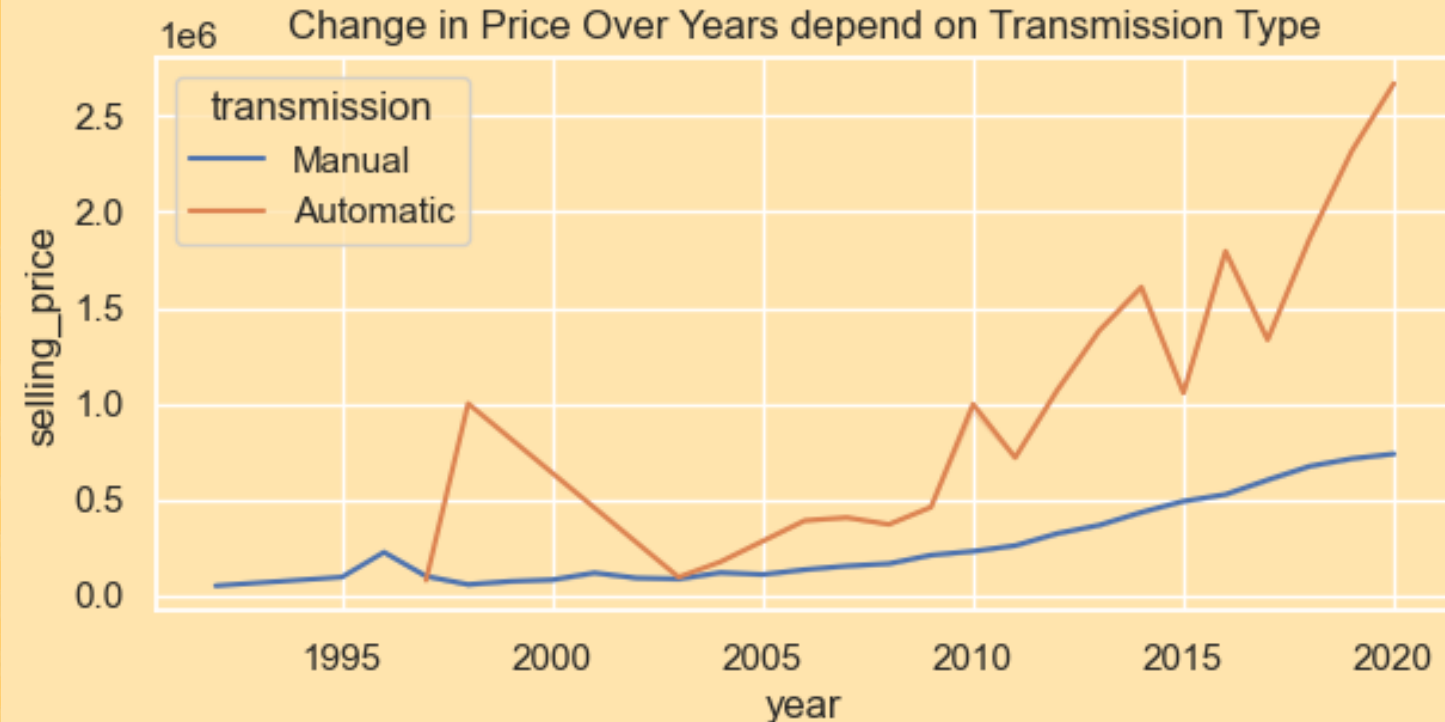


Total of Selling Car Depend of Transmission

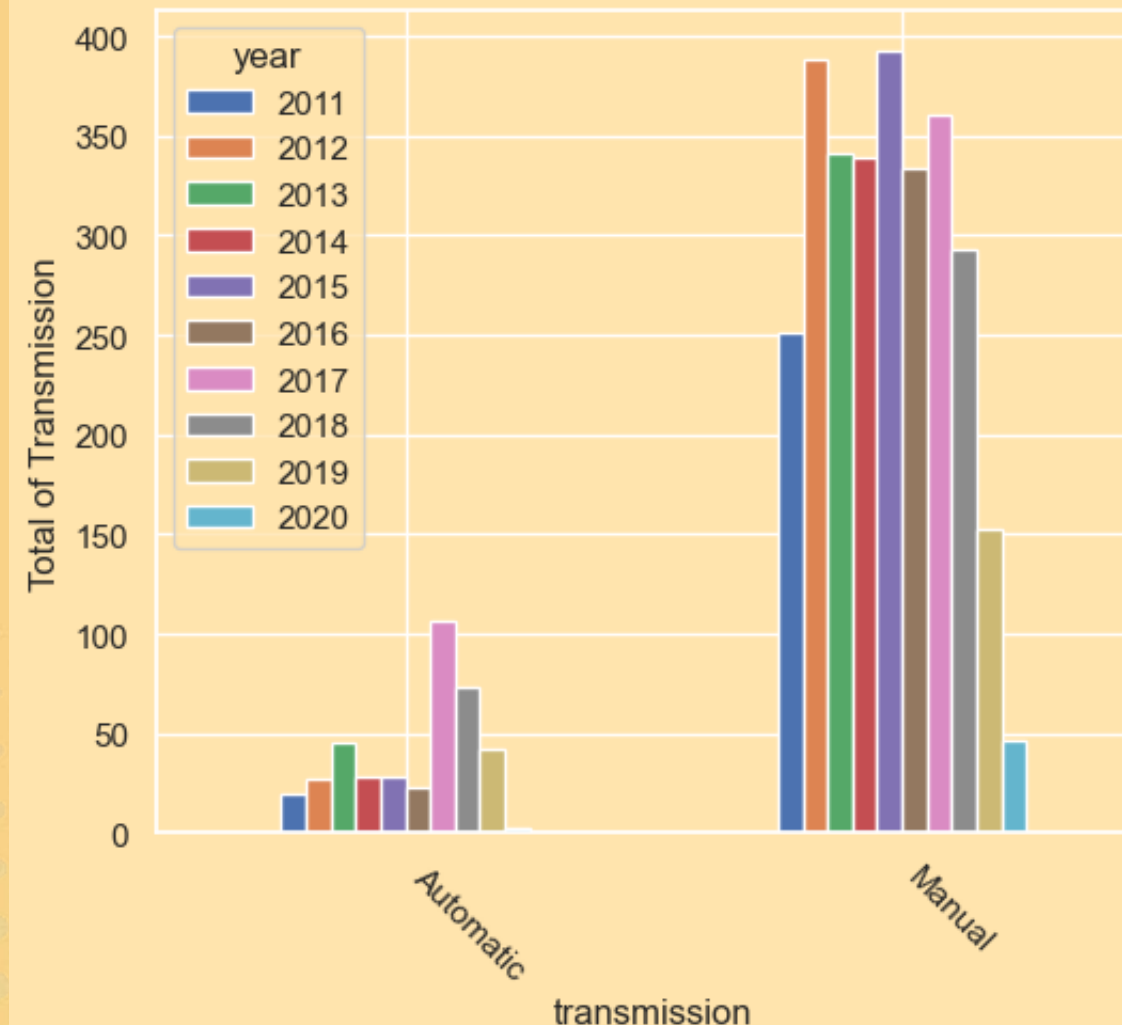


The results of the analysis show that almost 89% of the cars sold are manual transmission types. Sales of cars of this type are always higher than the automatic type. Although the number of sales of Automatic type cars is lower, this car has a much higher price than manual cars. The car sales of the two brands experienced a decline from 2018 to 2020. The highest sales of the Automatic type car occurred in 2017 and the highest manual type in 2015

Change in Price Over Years depend on Transmission Type

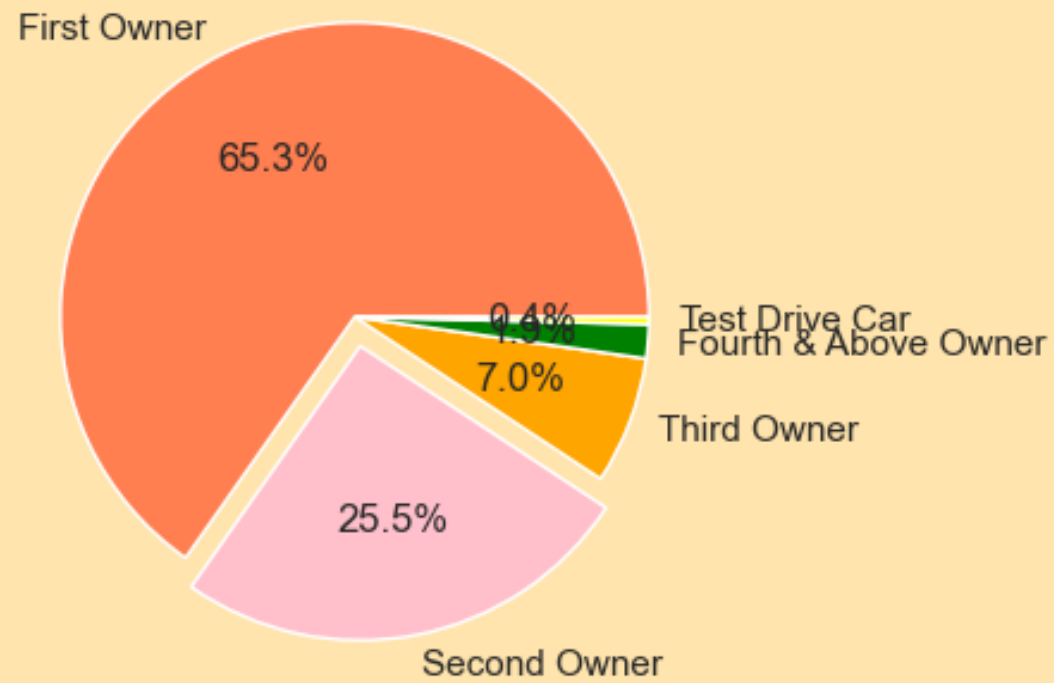


In the Past Ten Years

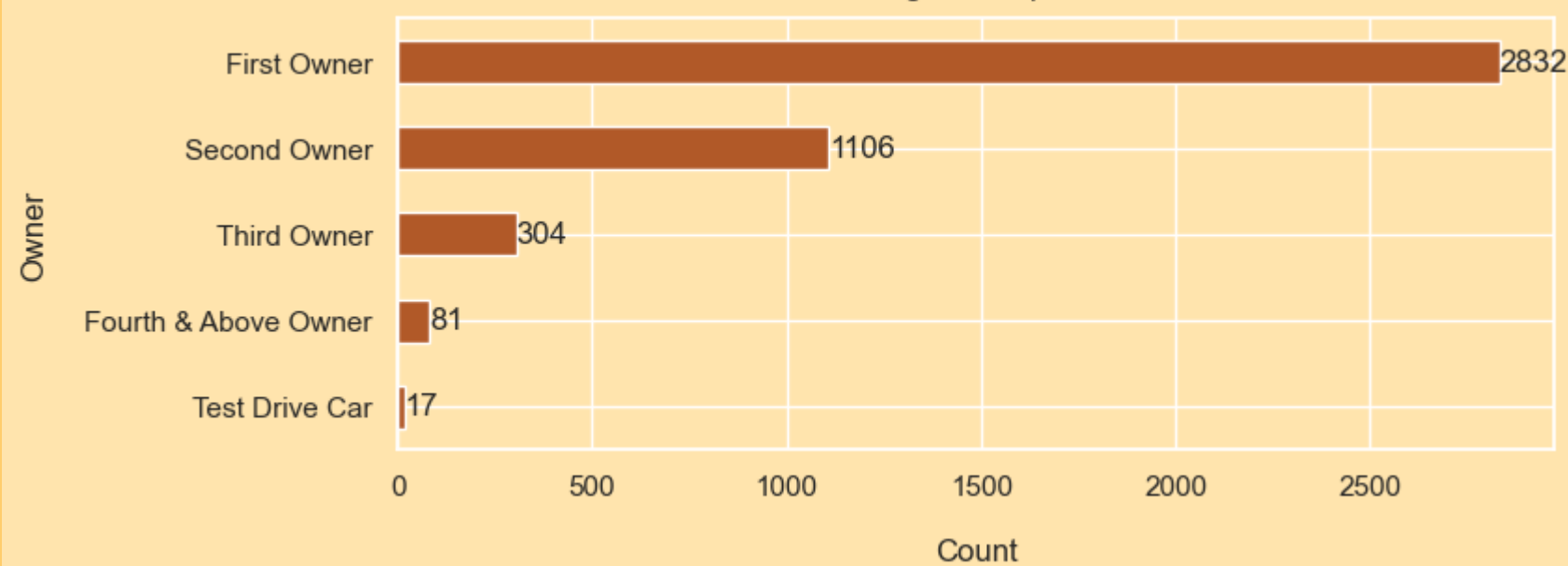


Owner Type Analyst of Selling Car

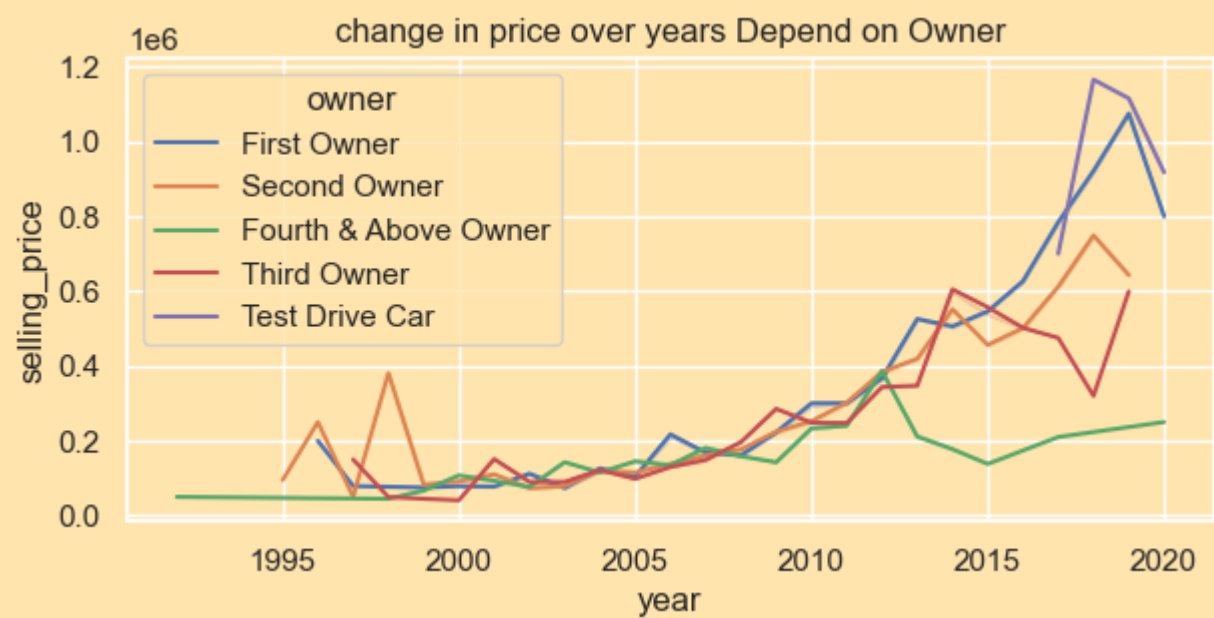
Owner Presentage



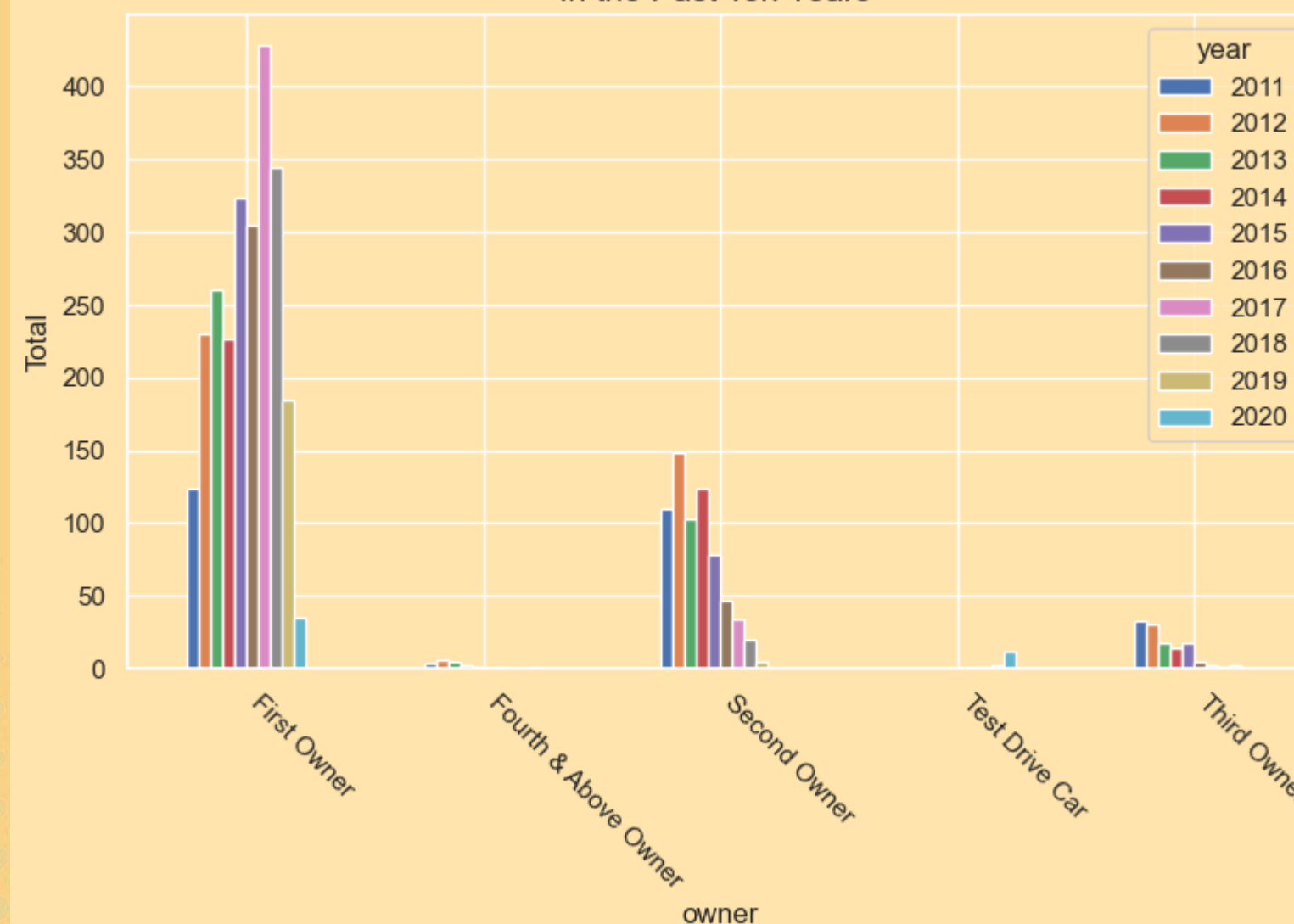
Total of Selling Car Depend of Owner



From the data on the results of car sales, it is shown that the first car owners mostly do it with a percentage of 65.3%. The highest car sales made by the first owner were in 2107 while by the third owner in 2012, the lowest car sales were cars used for Test Drive Cars and only occurred in 2017 with a total of 17 cars. Selling cars with the Test Drive Car type have the highest prices compared to others



In the Past Ten Years





Syntax dari Analisa ini dapat dilihat pada alamat github berikut:

<https://github.com/Ikalulus/The-Analyst-of-Car-Dekho-Part-One>

Untuk melihat syntax dan Analisa data yang lain dapat dilihat di:

<https://github.com/Ikalulus?tab=repositories>

Untuk melihat visualisasi data dinamis dapat dilihat pada link berikut:

<https://datastudio.google.com/reporting/b41becba-fa46-42cb-a019-b921febddd04d/page/hi26C>

Untuk melihat visualisasi data dinamis yang lain dapat dilihat pada link berikut:

<https://public.tableau.com/app/profile/ika1174>

<https://datastudio.google.com/reporting/40cbacc0-d53b-4f00-bb36-e4dad98ea46d/page/jrE7C>

<https://datastudio.google.com/reporting/4e34f9a9-a459-4821-94fd-b29792f3183c/page/hi26C>