

```
1 import pandas as pd
2
3 df_clean = pd.read_csv("processes2.csv")
4
5
6
7
8 # Calculate descriptive statistics for the dataset
9 desc_stats = data.describe()
10
11
12 # now to Visualize Data - We will select a few key variables for visualization and
13 # focus on 'selling_price', 'km_driven', and 'year' as key variables of interest.
14
15 # Import visualization scematics
16 import matplotlib.pyplot as plt
17 import seaborn as sns
18
19 # Setting the any style of the plots
20 sns.set_style("whitegrid")
21
22 plt.figure(figsize=(15, 5))
23 fig, ax = plt.subplots(1, 3, figsize=(18, 6))
24
25 # Histogram of selling prices as states well focus on the main variables.
26 sns.histplot(df_clean['selling_price'], bins=30, kde=True, ax=ax[0])
27 ax[0].set_title('Distribution of Selling Prices')
28
29 # Scatter plot of km_driven vs. selling_price Scatter plot helps pin point outliers
30 sns.scatterplot(x='km_driven', y='selling_price', data=df_clean, ax=ax[1])
31 ax[1].set_title('Selling Price vs. Kilometers Driven')
32
33 # Box plot of selling prices by year
34 sns.boxplot(x='year', y='selling_price', data=data, ax=ax[2])
35 ax[2].set_title('Selling Prices by Year')
36 plt.xticks(rotation=90) # Rotate x-axis labels for better readability
37
38 # Display the plots
39 plt.tight_layout()
40 plt.show()
41
42 # Display descriptive statistics ( this ties into the first code)
43 desc_stats
44
```

<Figure size 1500x500 with 0 Axes>



	Unnamed: 0	year	selling_price	km_driven	seats	max_power (in bph)	Mileage	Engine (CC)
count	2095.000000	2095.000000	2.095000e+03	2095.000000	2095.000000	2095.000000	2095.000000	2095.000000
mean	3155.537947	2014.052506	4.272799e+05	67413.593795	5.096897	77.410427	21.397928	1205.078282
std	1791.039215	3.273451	2.326698e+05	41580.846333	0.457000	19.884938	1.209234	245.058696
min	0.000000	2000.000000	4.595700e+04	1000.000000	4.000000	35.000000	19.600000	624.000000
25%	1589.500000	2012.000000	2.500000e+05	35000.000000	5.000000	67.040000	20.360000	998.000000
50%	3185.000000	2014.000000	3.900000e+05	60000.000000	5.000000	74.000000	21.100000	1248.000000