Import library

In [1]:
```
import numpy as np
import pandas as pd
```

Import dataset

In [5]:
```
d=pd.read_csv(r"C:\Users\user\Desktop\fiat500_VehicleSelection_Dataset (4).csv")
d
```

Out[5]:

	ID	model	engine_power	age_in_days	km	previous_owners	lat	lon	price
0	1	lounge	51	882	25000	1	44.907242	8.611560	8900
1	2	pop	51	1186	32500	1	45.666359	12.241890	8800
2	3	sport	74	4658	142228	1	45.503300	11.417840	4200
3	4	lounge	51	2739	160000	1	40.633171	17.634609	6000
4	5	pop	73	3074	106880	1	41.903221	12.495650	5700
...	...	...	...	...	...	...	...	...	...
1533	1534	sport	51	3712	115280	1	45.069679	7.704920	5200
1534	1535	lounge	74	3835	112000	1	45.845692	8.666870	4600
1535	1536	pop	51	2223	60457	1	45.481541	9.413480	7500
1536	1537	lounge	51	2557	80750	1	45.000702	7.682270	5990
1537	1538	pop	51	1766	54276	1	40.323410	17.568270	7900

1538 rows × 9 columns

Head

In [6]:
```
d.head()
```

Out[6]:

	ID	model	engine_power	age_in_days	km	previous_owners	lat	lon	price
0	1	lounge	51	882	25000	1	44.907242	8.611560	8900
1	2	pop	51	1186	32500	1	45.666359	12.241890	8800
2	3	sport	74	4658	142228	1	45.503300	11.417840	4200
3	4	lounge	51	2739	160000	1	40.633171	17.634609	6000
4	5	pop	73	3074	106880	1	41.903221	12.495650	5700

In [7]:
```
d.head(6)
```

Out[7]:

	ID	model	engine_power	age_in_days	km	previous_owners	lat	lon	price
0	1	lounge	51	882	25000	1	44.907242	8.611560	8900

	ID	model	engine_power	age_in_days	km	previous_owners	lat	lon	price
1	2	pop	51	3235	32500	1	45.666358	12.241890	8600
2	3	sport	74	4658	142228	1	45.503300	11.417840	4200
3	4	lounge	51	2739	160000	1	40.633171	17.634609	6000
4	5	pop	73	3074	106880	1	41.903221	12.495650	5700
5	6	pop	74	3623	70225	1	45.000702	7.682270	7900

tail

In [8]:
```
d.tail()
```

Out[8]:

	ID	model	engine_power	age_in_days	km	previous_owners	lat	lon	price
1533	1534	sport	51	3712	115280	1	45.069679	7.70492	5200
1534	1535	lounge	74	3835	112000	1	45.845692	8.66687	4600
1535	1536	pop	51	2223	60457	1	45.481541	9.41348	7500
1536	1537	lounge	51	2557	80750	1	45.000702	7.68227	5990
1537	1538	pop	51	1766	54276	1	40.323410	17.56827	7900

In [9]:
```
d.tail(7)
```

Out[9]:

	ID	model	engine_power	age_in_days	km	previous_owners	lat	lon	price
1531	1532	sport	73	4505	127000	1	45.528511	9.59323	4750
1532	1533	pop	51	1917	52008	1	45.548000	11.54947	9900
1533	1534	sport	51	3712	115280	1	45.069679	7.70492	5200
1534	1535	lounge	74	3835	112000	1	45.845692	8.66687	4600
1535	1536	pop	51	2223	60457	1	45.481541	9.41348	7500
1536	1537	lounge	51	2557	80750	1	45.000702	7.68227	5990
1537	1538	pop	51	1766	54276	1	40.323410	17.56827	7900

describe

In [10]:
```
d.describe()
```

Out[10]:

	ID	engine_power	age_in_days	km	previous_owners	lat	lo
count	1538.000000	1538.000000	1538.000000	1538.000000	1538.000000	1538.000000	1538.0000
mean	769.500000	51.904421	1650.980494	53396.011704	1.123537	43.541361	11.5634
std	444.126671	3.988023	1289.522278	40046.830723	0.416423	2.133518	2.3281
min	1.000000	51.000000	366.000000	1232.000000	1.000000	36.855839	7.2454
25%	385.250000	51.000000	670.000000	20006.250000	1.000000	41.802990	9.5050

	ID	engine_power	age_in_days	km	previous_owners	lat	lo
50%	769.500000	51.000000	1035.000000	39031.000000	1.000000	44.394096	11.8692
75%	1153.750000	51.000000	2616.000000	79667.750000	1.000000	45.467960	12.7690
max	1538.000000	77.000000	4658.000000	235000.000000	4.000000	46.795612	18.3655

shape

In [11]:
```
np.shape(d)
```

Out[11]: (1538, 9)

size

In [13]:
```
np.size(d)
```

Out[13]: 13842

missing values

In [16]:
```
d.isnull()
```

Out[16]:

	ID	model	engine_power	age_in_days	km	previous_owners	lat	lon	price
0	False	False	False	False	False	False	False	False	False
1	False	False	False	False	False	False	False	False	False
2	False	False	False	False	False	False	False	False	False
3	False	False	False	False	False	False	False	False	False
4	False	False	False	False	False	False	False	False	False
...	...	...	...	...	...	...	...	...	...
1533	False	False	False	False	False	False	False	False	False
1534	False	False	False	False	False	False	False	False	False
1535	False	False	False	False	False	False	False	False	False
1536	False	False	False	False	False	False	False	False	False
1537	False	False	False	False	False	False	False	False	False

1538 rows × 9 columns

fill/drop

In [14]:
```
d.fillna(value=0)
```

Out[14]:

	ID	model	engine_power	age_in_days	km	previous_owners	lat	lon	price
0	1	lounge	51	882	25000	1	44.907242	8.611560	8900
1	2	pop	51	1186	32500	1	45.666359	12.241890	8800
2	3	sport	74	4658	142228	1	45.503300	11.417840	4200
3	4	lounge	51	2739	160000	1	40.633171	17.634609	6000
4	5	pop	73	3074	106880	1	41.903221	12.495650	5700
...	...	...	...	...	...	...	...	...	...
1533	1534	sport	51	3712	115280	1	45.069679	7.704920	5200
1534	1535	lounge	74	3835	112000	1	45.845692	8.666870	4600
1535	1536	pop	51	2223	60457	1	45.481541	9.413480	7500
1536	1537	lounge	51	2557	80750	1	45.000702	7.682270	5990
1537	1538	pop	51	1766	54276	1	40.323410	17.568270	7900

1538 rows × 9 columns

In [15]:
```
d.dropna()
```

Out[15]:

	ID	model	engine_power	age_in_days	km	previous_owners	lat	lon	price
0	1	lounge	51	882	25000	1	44.907242	8.611560	8900
1	2	pop	51	1186	32500	1	45.666359	12.241890	8800
2	3	sport	74	4658	142228	1	45.503300	11.417840	4200
3	4	lounge	51	2739	160000	1	40.633171	17.634609	6000
4	5	pop	73	3074	106880	1	41.903221	12.495650	5700
...	...	...	...	...	...	...	...	...	...
1533	1534	sport	51	3712	115280	1	45.069679	7.704920	5200
1534	1535	lounge	74	3835	112000	1	45.845692	8.666870	4600
1535	1536	pop	51	2223	60457	1	45.481541	9.413480	7500
1536	1537	lounge	51	2557	80750	1	45.000702	7.682270	5990
1537	1538	pop	51	1766	54276	1	40.323410	17.568270	7900

1538 rows × 9 columns