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

In [5]:
```python
x=pd.read_csv(r"C:\Users\user\Downloads\fiat500_VehicleSelection_Dataset - fiat
x
```

Out[5]:

	ID	model	engine_power	age_in_days	km	previous_owners	lat	l
0	1.0	lounge	51.0	882.0	25000.0	1.0	44.907242	8.6115598
1	2.0	pop	51.0	1186.0	32500.0	1.0	45.666359	12.2418889
2	3.0	sport	74.0	4658.0	142228.0	1.0	45.503300	11.4178
3	4.0	lounge	51.0	2739.0	160000.0	1.0	40.633171	17.6346092
4	5.0	pop	73.0	3074.0	106880.0	1.0	41.903221	12.4956502
...	...	...	...	...	...	...	...	
1544	NaN	NaN	NaN	NaN	NaN	NaN	NaN	leng
1545	NaN	NaN	NaN	NaN	NaN	NaN	NaN	conc
1546	NaN	NaN	NaN	NaN	NaN	NaN	NaN	Null valu
1547	NaN	NaN	NaN	NaN	NaN	NaN	NaN	fi
1548	NaN	NaN	NaN	NaN	NaN	NaN	NaN	sear

1549 rows × 11 columns

In [6]:
```python
x.dtypes
```

Out[6]:
```
ID              float64
model            object
engine_power    float64
age_in_days     float64
km              float64
previous_owners float64
lat             float64
lon              object
price            object
Unnamed: 9      float64
Unnamed: 10      object
dtype: object
```

```python
In [7]: x.head()
```

Out[7]:

	ID	model	engine_power	age_in_days	km	previous_owners	lat	lon
0	1.0	lounge	51.0	882.0	25000.0	1.0	44.907242	8.611559868
1	2.0	pop	51.0	1186.0	32500.0	1.0	45.666359	12.24188995
2	3.0	sport	74.0	4658.0	142228.0	1.0	45.503300	11.41784
3	4.0	lounge	51.0	2739.0	160000.0	1.0	40.633171	17.63460922
4	5.0	pop	73.0	3074.0	106880.0	1.0	41.903221	12.49565029

```python
In [8]: x.tail()
```

Out[8]:

	ID	model	engine_power	age_in_days	km	previous_owners	lat	lon	price	Un
1544	NaN	NaN	NaN	NaN	NaN	NaN	NaN	length	5	
1545	NaN	NaN	NaN	NaN	NaN	NaN	NaN	concat	lonprice	
1546	NaN	NaN	NaN	NaN	NaN	NaN	NaN	Null values	NO	
1547	NaN	NaN	NaN	NaN	NaN	NaN	NaN	find	1	
1548	NaN	NaN	NaN	NaN	NaN	NaN	NaN	search	1	

```python
In [9]: x.columns
```

```
Out[9]: Index(['ID', 'model', 'engine_power', 'age_in_days', 'km', 'previous_owners',
       'lat', 'lon', 'price', 'Unnamed: 9', 'Unnamed: 10'],
      dtype='object')
```

```python
In [10]: x.index
```

```
Out[10]: RangeIndex(start=0, stop=1549, step=1)
```

In [11]:
```python
x.describe()
```

Out[11]:

	ID	engine_power	age_in_days	km	previous_owners	lat	U
count	1538.000000	1538.000000	1538.000000	1538.000000	1538.000000	1538.000000	
mean	769.500000	51.904421	1650.980494	53396.011704	1.123537	43.541361	
std	444.126671	3.988023	1289.522278	40046.830723	0.416423	2.133518	
min	1.000000	51.000000	366.000000	1232.000000	1.000000	36.855839	
25%	385.250000	51.000000	670.000000	20006.250000	1.000000	41.802990	
50%	769.500000	51.000000	1035.000000	39031.000000	1.000000	44.394096	
75%	1153.750000	51.000000	2616.000000	79667.750000	1.000000	45.467960	
max	1538.000000	77.000000	4658.000000	235000.000000	4.000000	46.795612	

In [12]:
```python
x["km"]
```

Out[12]:
```
0          25000.0
1          32500.0
2         142228.0
3         160000.0
4         106880.0
            ...
1544           NaN
1545           NaN
1546           NaN
1547           NaN
1548           NaN
Name: km, Length: 1549, dtype: float64
```

In [13]:
```python
x[0:2]
```

Out[13]:

	ID	model	engine_power	age_in_days	km	previous_owners	lat	lon	p
0	1.0	lounge	51.0	882.0	25000.0	1.0	44.907242	8.611559868	8
1	2.0	pop	51.0	1186.0	32500.0	1.0	45.666359	12.24188995	8

In [14]:
```python
x.loc[0:2]
```

Out[14]:

	ID	model	engine_power	age_in_days	km	previous_owners	lat	lon	
0	1.0	lounge	51.0	882.0	25000.0	1.0	44.907242	8.611559868	
1	2.0	pop	51.0	1186.0	32500.0	1.0	45.666359	12.24188995	
2	3.0	sport	74.0	4658.0	142228.0	1.0	45.503300	11.41784	

```python
In [15]: x.iloc[0:2]
```

Out[15]:

	ID	model	engine_power	age_in_days	km	previous_owners	lat	lon	pi
0	1.0	lounge	51.0	882.0	25000.0	1.0	44.907242	8.611559868	8!
1	2.0	pop	51.0	1186.0	32500.0	1.0	45.666359	12.24188995	8:

```python
In [17]: x.loc["model":"km"]
```

Out[17]:

	ID	model	engine_power	age_in_days	km	previous_owners	lat	lon	price	Unnamed: 9	Unnai

```python
In [18]: x[x["km"]<=2]
```

Out[18]:

	ID	model	engine_power	age_in_days	km	previous_owners	lat	lon	price	Unnamed: 9	Unnai

```python
In [19]: x.fillna(value=5)
```

Out[19]:

	ID	model	engine_power	age_in_days	km	previous_owners	lat	lol
0	1.0	lounge	51.0	882.0	25000.0	1.0	44.907242	8.611559868
1	2.0	pop	51.0	1186.0	32500.0	1.0	45.666359	12.24188999
2	3.0	sport	74.0	4658.0	142228.0	1.0	45.503300	11.41784
3	4.0	lounge	51.0	2739.0	160000.0	1.0	40.633171	17.63460922
4	5.0	pop	73.0	3074.0	106880.0	1.0	41.903221	12.49565029
...	...	...	...	...	...	...	...	..
1544	5.0	5	5.0	5.0	5.0	5.0	5.000000	lengtl
1545	5.0	5	5.0	5.0	5.0	5.0	5.000000	conca
1546	5.0	5	5.0	5.0	5.0	5.0	5.000000	Null value:
1547	5.0	5	5.0	5.0	5.0	5.0	5.000000	finc
1548	5.0	5	5.0	5.0	5.0	5.0	5.000000	searcl

1549 rows × 11 columns

```python
In [20]: x.dropna()
```

Out[20]:

	ID	model	engine_power	age_in_days	km	previous_owners	lat	lon	price	Unnamed: 9	Unnai

In [21]: `x.fillna(value=5)`

Out[21]:

	ID	model	engine_power	age_in_days	km	previous_owners	lat	lon
0	1.0	lounge	51.0	882.0	25000.0	1.0	44.907242	8.6115598686
1	2.0	pop	51.0	1186.0	32500.0	1.0	45.666359	12.2418899
2	3.0	sport	74.0	4658.0	142228.0	1.0	45.503300	11.41784
3	4.0	lounge	51.0	2739.0	160000.0	1.0	40.633171	17.63460922
4	5.0	pop	73.0	3074.0	106880.0	1.0	41.903221	12.4956502
...	...	...	...	...	...	...	...	..
1544	5.0	5	5.0	5.0	5.0	5.0	5.000000	length
1545	5.0	5	5.0	5.0	5.0	5.0	5.000000	conca
1546	5.0	5	5.0	5.0	5.0	5.0	5.000000	Null values
1547	5.0	5	5.0	5.0	5.0	5.0	5.000000	find
1548	5.0	5	5.0	5.0	5.0	5.0	5.000000	search

1549 rows × 11 columns

In [22]: `x.dropna()`

Out[22]:

ID	model	engine_power	age_in_days	km	previous_owners	lat	lon	price	Unnamed: 9	Unnar

In [ ]: