# Miniproject
# fiat500_VechicleSelection_Dataset

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importing libraries

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

importing dataset

In [2]:
```
data=pd.read_csv(r"C:\Users\user\Downloads\fiat500_VehicleSelection_Dataset - fia
data
```

Out[2]:

| | ID | model | engine_power | age_in_days | km | previous_owners | lat | lor |
|---|---|---|---|---|---|---|---|---|
| **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 |
| **...** | ... | ... | ... | ... | ... | ... | ... | .. |
| **1544** | NaN | NaN | NaN | NaN | NaN | NaN | NaN | length |
| **1545** | NaN | NaN | NaN | NaN | NaN | NaN | NaN | conca |
| **1546** | NaN | NaN | NaN | NaN | NaN | NaN | NaN | Null values |
| **1547** | NaN | NaN | NaN | NaN | NaN | NaN | NaN | finc |
| **1548** | NaN | NaN | NaN | NaN | NaN | NaN | NaN | search |

1549 rows × 11 columns

head

In [3]:
```
data.head()
```

Out[3]:

| | ID | model | engine_power | age_in_days | km | previous_owners | lat | lon | pr |
|---|---|---|---|---|---|---|---|---|---|
| **0** | 1.0 | lounge | 51.0 | 882.0 | 25000.0 | 1.0 | 44.907242 | 8.611559868 | 89 |
| **1** | 2.0 | pop | 51.0 | 1186.0 | 32500.0 | 1.0 | 45.666359 | 12.24188995 | 88 |
| **2** | 3.0 | sport | 74.0 | 4658.0 | 142228.0 | 1.0 | 45.503300 | 11.41784 | 42 |
| **3** | 4.0 | lounge | 51.0 | 2739.0 | 160000.0 | 1.0 | 40.633171 | 17.63460922 | 60 |
| **4** | 5.0 | pop | 73.0 | 3074.0 | 106880.0 | 1.0 | 41.903221 | 12.49565029 | 57 |

tail

In [4]:
```
data.tail()
```

Out[4]:

| | ID | model | engine_power | age_in_days | km | previous_owners | lat | lon | price | Unn |
|---|---|---|---|---|---|---|---|---|---|---|
| **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 | |

describe

In [6]:
```
data.describe()
```

Out[6]:

| | ID | engine_power | age_in_days | km | previous_owners | lat | Un |
|---|---|---|---|---|---|---|---|
| **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 | |

shape

In [8]:
```
print(np.shape(data))
```

```
(1549, 11)
```

size

In [9]:
```
print(np.size(data))
```

```
17039
```

finding missing values

In [10]:
```
data.isnull()
```

Out[10]:

| | ID | model | engine_power | age_in_days | km | previous_owners | lat | lon | price | Unna |
|---|---|---|---|---|---|---|---|---|---|---|
| **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 | |
| **...** | ... | ... | ... | ... | ... | ... | ... | ... | ... | |
| **1544** | True | True | True | True | True | True | True | False | False | |
| **1545** | True | True | True | True | True | True | True | False | False | |
| **1546** | True | True | True | True | True | True | True | False | False | |
| **1547** | True | True | True | True | True | True | True | False | False | |
| **1548** | True | True | True | True | True | True | True | False | False | |

1549 rows × 11 columns

fill

In [13]:
```
data.fillna(0)
```

Out[13]:

| | 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 |
| **...** | ... | ... | ... | ... | ... | ... | ... | ... |
| **1544** | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.000000 | length |
| **1545** | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.000000 | concat |
| **1546** | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.000000 | Null values |
| **1547** | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.000000 | find |
| **1548** | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.000000 | search |

1549 rows × 11 columns

drop

In [17]:
```
data.dropna()
```

Out[17]:

| ID | model | engine_power | age_in_days | km | previous_owners | lat | lon | price | Unnamed: 9 | Unnam |
|---|---|---|---|---|---|---|---|---|---|---|

In [ ]: