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

In [3]:
```
1 data=pd.read_csv('fiat500.csv')
```

In [6]:
```
1 data.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 [12]:
```
1 data1=data.loc[(data.km<=50000)]
```

In [13]:
```
1 data1
2
```

Out[13]:

	ID	model	engine_power	age_in_days	km	previous_owners	lat	lon	price
0	1	lounge	51	882	25000	1	44.907242	8.61156	8900
1	2	pop	51	1186	32500	1	45.666359	12.24189	8800
6	7	lounge	51	731	11600	1	44.907242	8.61156	10750
7	8	lounge	51	1521	49076	1	41.903221	12.49565	9190
10	11	pop	51	790	43286	1	40.871429	14.43896	8950
...	...	...	...	...	...	...	...	...	...
1525	1526	lounge	51	790	41870	1	45.707249	11.47760	9500
1526	1527	lounge	51	1705	23600	1	38.122070	13.36112	9300
1527	1528	pop	51	517	3000	1	40.748241	14.52835	9999
1529	1530	lounge	51	731	22551	1	38.122070	13.36112	9900
1530	1531	lounge	51	670	29000	1	45.764648	8.99450	10800

907 rows × 9 columns

In [14]:
```
1 data2=data1.groupby(['model']).count()
```

In [15]:
```
1 data2
```

Out[15]:

model	ID	engine_power	age_in_days	km	previous_owners	lat	lon	price
lounge	734	734	734	734	734	734	734	734
pop	162	162	162	162	162	162	162	162
sport	11	11	11	11	11	11	11	11

In [30]:
```
1 data2=data2.rename(columns={'age_in_days':'ageindays'})
2 list(data2)
```

Out[30]:
```
['ID',
 'engine_power',
 'ageindays',
 'km',
 'previous_owners',
 'lat',
 'lon',
 'price']
```

In [29]:
```
1 data2.head()
```

Out[29]:

model	ID	engine_power	age_in_days	km	previous_owners	lat	lon	price
lounge	734	734	734	734	734	734	734	734
pop	162	162	162	162	162	162	162	162
sport	11	11	11	11	11	11	11	11

In [31]:
```
1 print(data.to_string())
```

```
        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
5        6     pop            74         3623   70225                1  45.000702   7.682270   7900
6        7  lounge            51          731   11600                1  44.907242   8.611560  10750
7        8  lounge            51         1521   49076                1  41.903221  12.495650   9190
8        9   sport            73         4049   76000                1  45.548000  11.549470   5600
9       10   sport            51         3653   89000                1  45.438301  10.991700   6000
10      11     pop            51          790   43286                1  40.871429  14.438960   8950
11      12  lounge            51          366   17500                1  45.069679   7.704920  10990
12      13  lounge            51          456   18450                1  45.426571  11.788130   9700
13      14     pop            51         3835  120000                1  40.531590  17.436159   4800
14      15  lounge            51         1035   40500                1  40.911362  14.211200   9300
15      16  lounge            51         1096   28200                1  45.697208   9.845970   9500
16      17  lounge            73         4200  110000                1  41.082352  14.254250   5250
17      18     pop            51         2223   96848                1  43.782372  11.254990   7990
```

In [32]:
```
1 data.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 1538 entries, 0 to 1537
Data columns (total 9 columns):
 #   Column           Non-Null Count  Dtype  
---  ------           --------------  -----  
 0   ID               1538 non-null   int64  
 1   model            1538 non-null   object 
 2   engine_power     1538 non-null   int64  
 3   age_in_days      1538 non-null   int64  
 4   km               1538 non-null   int64  
 5   previous_owners  1538 non-null   int64  
 6   lat              1538 non-null   float64
 7   lon              1538 non-null   float64
 8   price            1538 non-null   int64  
dtypes: float64(2), int64(6), object(1)
memory usage: 108.3+ KB
```

In [33]:
```
1 data.groupby(['model']).count()
```

Out[33]:

model	ID	engine_power	age_in_days	km	previous_owners	lat	lon	price
lounge	1094	1094	1094	1094	1094	1094	1094	1094
pop	358	358	358	358	358	358	358	358
sport	86	86	86	86	86	86	86	86

In [39]:
```
1  num=int(input())
2  n=100
3  c=0
4  while num>0:
5      for i in range(2,n):
6          if n%i!=0:
7              c=c+1
8          if (c==n-2):
9                  print(n)
10                 num-=1
11     n+=1
12     c=0
```

```
5
101
103
107
109
113
```

In [ ]:
```
1 data['pre_owner']
```

In [ ]:
```
1
```