

```
In [5]: import pandas as pd
```

```
In [6]: data=pd.read_csv('/home/placement/Desktop/data analysis(413)/fiat500.csv')
```

```
In [7]: data
```

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
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 [8]: data1=data.loc[data.km<=50000]
data1
```

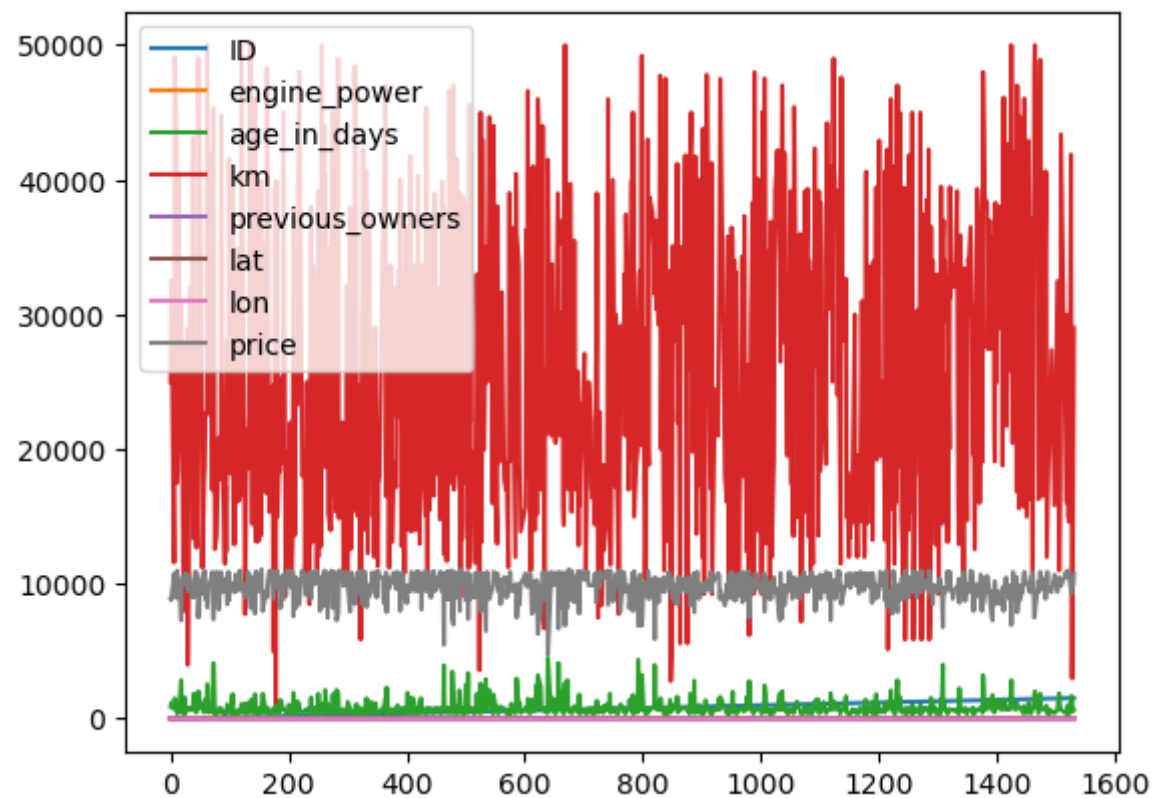
Out[8]:

	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 [9]: data1.plot()
```

```
Out[9]: <Axes: >
```



```
In [10]: data2=data.groupby(['model']).count()  
data2
```

Out[10]:

	ID	engine_power	age_in_days	km	previous_owners	lat	lon	price
model								
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 []:

In []:

In []:

```
In [11]: data3=data1.drop(['model'],axis=1)
data3
```

Out[11]:

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

907 rows × 8 columns

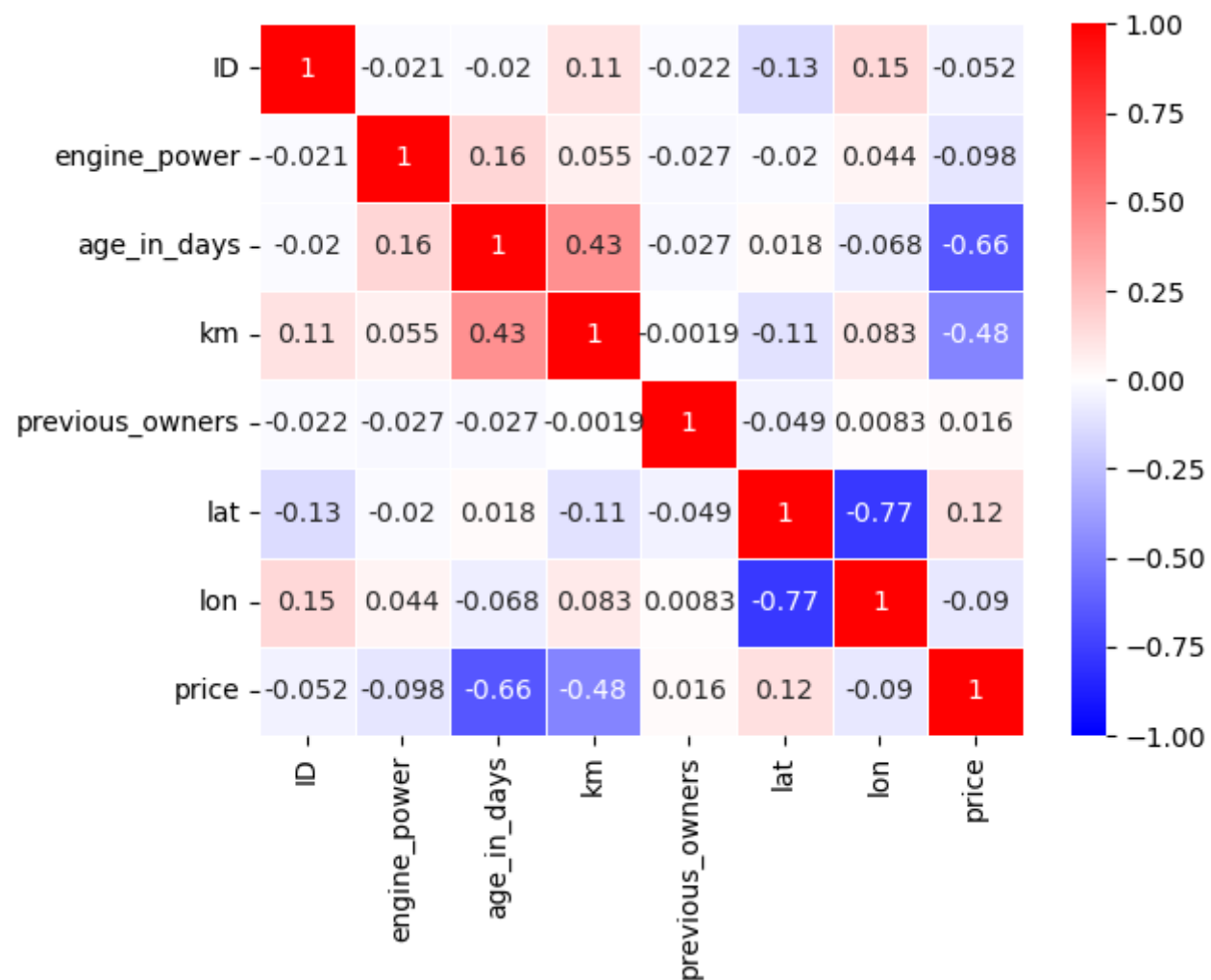
```
In [12]: #just trying to find coorelation between  
cor=data3.corr()  
cor
```

Out[12]:

	ID	engine_power	age_in_days	km	previous_owners	lat	lon	price
ID	1.000000	-0.021308	-0.019672	0.112097	-0.021821	-0.134745	0.153563	-0.051750
engine_power	-0.021308	1.000000	0.160405	0.055262	-0.026521	-0.019823	0.043889	-0.097790
age_in_days	-0.019672	0.160405	1.000000	0.430566	-0.027217	0.017777	-0.067735	-0.656945
km	0.112097	0.055262	0.430566	1.000000	-0.001910	-0.109633	0.083076	-0.479849
previous_owners	-0.021821	-0.026521	-0.027217	-0.001910	1.000000	-0.049327	0.008286	0.015958
lat	-0.134745	-0.019823	0.017777	-0.109633	-0.049327	1.000000	-0.774363	0.120258
lon	0.153563	0.043889	-0.067735	0.083076	0.008286	-0.774363	1.000000	-0.090349
price	-0.051750	-0.097790	-0.656945	-0.479849	0.015958	0.120258	-0.090349	1.000000

```
In [16]: import seaborn as sns
sns.heatmap(cor, vmax=1, vmin=-1, annot=True, linewidths=.5, cmap='bwr')
```

Out[16]: <Axes: >



In []:

In []:

In []: