```
In [1]: import pandas as pd
 In [2]: data=pd.read csv("/home/placement/Downloads/fiat500.csv")
In [15]: data1=data.loc[(data.km<=50000)]</pre>
In [16]: data1
Out[16]:
                       model engine_power age_in_days
                                                         km previous_owners
                                                                                    lat
                                                                                            lon
                                                                                                 price
                                                  882 25000
               0
                    1 lounge
                                       51
                                                                           1 44.907242
                                                                                         8.61156
                                                                                                 8900
                                                  1186
                                                       32500
                                                                             45.666359 12.24189
                                                                                                 8800
              1
                    2
                         pop
                                       51
                                                       11600
                                                                                        8.61156
                                                                                                10750
               6
                    7 lounge
                                       51
                                                   731
                                                                             44.907242
                                                       49076
                                                                             41.903221 12.49565
              7
                      lounge
                                       51
                                                  1521
                                                                                                 9190
              10
                   11
                                       51
                                                   790
                                                       43286
                                                                             40.871429 14.43896
                                                                                                 8950
                         pop
            1525
                 1526
                      lounge
                                       51
                                                   790
                                                       41870
                                                                             45.707249 11.47760
                                                                                                 9500
                 1527 lounge
                                                  1705 23600
                                                                           1 38.122070 13.36112
                                                                                                 9300
            1526
                                       51
            1527 1528
                                                        3000
                                                                             40.748241 14.52835
                                       51
                                                   517
                                                                                                 9999
                         pop
                 1530 lounge
                                                   731 22551
                                                                          1 38.122070 13.36112
            1529
                                       51
                                                                                                 9900
            1530 1531 lounge
                                       51
                                                   670 29000
                                                                           1 45.764648
                                                                                        8.99450
                                                                                                10800
           907 rows × 9 columns
In [21]:
           data1=data.groupby(['model']).count()
```

In [22]: data1

```
Out[22]:
                     ID engine power age in days
                                                 km previous owners
                                                                      lat
                                                                           Ion price
            model
           lounge 1094
                               1094
                                           1094 1094
                                                               1094
                                                                    1094
                                                                          1094
                                                                               1094
                                358
                                                 358
                                                                      358
                                                                           358
                                                                                 358
                   358
                                            358
                                                                358
              pop
                                 86
                                                                 86
             sport
                    86
                                             86
                                                  86
                                                                      86
                                                                            86
                                                                                 86
In [34]: | data1=data1.rename(columns={'model name':'model'})
          list(data1)
Out[34]: ['ID', 'engine', 'age_in_days', 'km', 'previous_owners', 'lat', 'lon', 'price']
          Type Markdown and LaTeX: \alpha^2
          Type Markdown and LaTeX: \alpha^2
In [32]:
          data1=data1.rename(columns={'engine power':'engine'})
          list(data1)
Out[32]: ['ID', 'engine', 'age in days', 'km', 'previous owners', 'lat', 'lon', 'price']
In [35]: data1
Out[35]:
                     ID engine age_in_days
                                            km previous_owners
                                                                     lon price
                                                                 lat
            model
           lounge 1094
                         1094
                                     1094 1094
                                                          1094
                                                               1094
                                                                    1094
                                                                          1094
              pop
                   358
                          358
                                      358
                                           358
                                                           358
                                                                358
                                                                     358
                                                                           358
                    86
                           86
                                       86
                                            86
                                                           86
                                                                 86
                                                                      86
                                                                            86
             sport
```

```
In [42]: | data=data.groupby(['model']).count()
In [44]: data1
Out[44]:
                    ID engine age_in_days
                                           km previous_owners
                                                                     Ion price
                                                                lat
            model
           lounge 1094
                         1094
                                     1094 1094
                                                         1094
                                                              1094
                                                                    1094
                                                                         1094
              pop
                   358
                          358
                                      358
                                           358
                                                          358
                                                               358
                                                                     358
                                                                          358
                    86
                           86
                                       86
                                            86
                                                           86
                                                                86
                                                                     86
                                                                           86
             sport
 In [ ]:
```