```
In [38]:
           import pandas as pd
In [39]:
           car_sales = pd.read_csv("data/car-sales.csv")
           car_sales
Out[39]:
             Make Colour Odometer (KM) Doors
                                                      Price
            Toyota
                     White
                                   150043
                                                   $4,000.00
             Honda
                                    87899
                                                   $5,000.00
                       Red
             Toyota
                      Blue
                                    32549
                                               3
                                                   $7,000.00
              BMW
                      Black
                                    11179
                                                  $22,000.00
             Nissan
                     White
                                   213095
                                                   $3,500.00
             Toyota
                     Green
                                    99213
                                                   $4,500.00
            Honda
                      Blue
                                    45698
                                                   $7,500.00
            Honda
                      Blue
                                    54738
                                                   $7,000.00
                     White
             Toyota
                                    60000
                                                   $6,250.00
             Nissan
                     White
                                    31600
                                                   $9,700.00
In [40]:
           # Show the count of each pair of Make and Doors values
           pd.crosstab(car_sales["Make"], car_sales["Doors"])
Out[40]:
           Doors 3 4 5
           Make
           BMW 0 0 1
          Honda 0 3 0
          Nissan 0 2 0
          Toyota 1 3 0
In [41]:
           # Group the rows according to Make column
           # Show mean for each numeric columns
           # Instead of mean some other functions also can used. (Ex: sum, std, . . .)
           car_sales.groupby(["Make"]).mean()
Out[41]:
                  Odometer (KM) Doors
           Make
           BMW
                                   5.00
                    11179.000000
          Honda
                    62778.333333
                                   4.00
          Nissan
                   122347.500000
                                   4.00
```

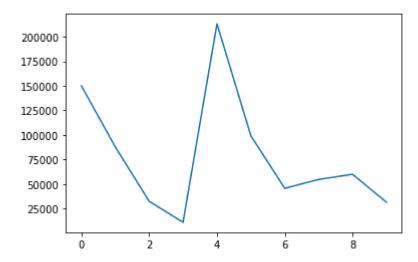
Odometer (KM) Doors

```
        Make

        Toyota
        85451.250000
        3.75
```

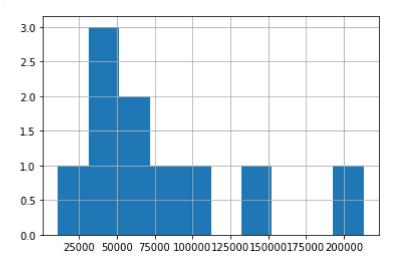
```
In [42]: # Plot Odometer (KM) column with index
    car_sales["Odometer (KM)"].plot()
```

Out[42]: <AxesSubplot:>



```
In [43]: # Plot histogram for Odometer (KM) column with index
    car_sales["Odometer (KM)"].hist()
```

Out[43]: <AxesSubplot:>



```
# Convert String column(Price) to an integer column

# replace , . $ symbols with ''
# convert resulting string to an integer
# devide that value by 100 (Because we remove decimal symbol also)
car_sales["Price"] = car_sales["Price"].replace('[\$\,\.]', '', regex=True).astype(int)
```

In [48]:

```
car_sales["Price"]
                4000.0
Out[48]:
                 5000.0
          2
                7000.0
          3
               22000.0
          4
                3500.0
          5
                4500.0
          6
                7500.0
          7
                7000.0
          8
                6250.0
          9
                9700.0
          Name: Price, dtype: float64
In [49]:
           car_sales["Price"].plot()
          <AxesSubplot:>
Out[49]:
          22500
          20000
          17500
          15000
          12500
          10000
           7500
           5000
                            ź
                                                 6
                                                           8
 In [ ]:
```