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

In [3]:
```
car_sales = pd.read_csv("data/car-sales.csv")
```

In [4]:
```
# To display first 5 rows
car_sales.head()
```

Out[4]:

	Make	Colour	Odometer (KM)	Doors	Price
0	Toyota	White	150043	4	$4,000.00
1	Honda	Red	87899	4	$5,000.00
2	Toyota	Blue	32549	3	$7,000.00
3	BMW	Black	11179	5	$22,000.00
4	Nissan	White	213095	4	$3,500.00

In [5]:
```
# To display first 7 rows
car_sales.head(7)
```

Out[5]:

	Make	Colour	Odometer (KM)	Doors	Price
0	Toyota	White	150043	4	$4,000.00
1	Honda	Red	87899	4	$5,000.00
2	Toyota	Blue	32549	3	$7,000.00
3	BMW	Black	11179	5	$22,000.00
4	Nissan	White	213095	4	$3,500.00
5	Toyota	Green	99213	4	$4,500.00
6	Honda	Blue	45698	4	$7,500.00

In [6]:
```
# To display last 5 rows
car_sales.tail()
```

Out[6]:

	Make	Colour	Odometer (KM)	Doors	Price
5	Toyota	Green	99213	4	$4,500.00
6	Honda	Blue	45698	4	$7,500.00
7	Honda	Blue	54738	4	$7,000.00
8	Toyota	White	60000	4	$6,250.00
9	Nissan	White	31600	4	$9,700.00

In [7]:
```
# To display last 3 rows
```

```
car_sales.tail(3)
```

Out[7]:

	Make	Colour	Odometer (KM)	Doors	Price
7	Honda	Blue	54738	4	$7,000.00
8	Toyota	White	60000	4	$6,250.00
9	Nissan	White	31600	4	$9,700.00

In [10]:
```
# loc => index
# iloc => position
# define Series (column) with custom indices
animals = pd.Series(["cat", "dog", "snake", "panda", "bird"], index=[0,3,9,7,3])
```

In [11]:
```
animals
```

Out[11]:
```
0      cat
3      dog
9    snake
7    panda
3     bird
dtype: object
```

In [12]:
```
# Display rows with index 3
animals.loc[3]
```

Out[12]:
```
3     dog
3    bird
dtype: object
```

In [13]:
```
# display the row in position 3
animals.iloc[3]
```

Out[13]:
```
'panda'
```

In [14]:
```
# position and index of car_sales are same

# display row with index 3
car_sales.loc[3]
```

Out[14]:
```
Make                  BMW
Colour              Black
Odometer (KM)       11179
Doors                   5
Price            $22,000.00
Name: 3, dtype: object
```

In [15]:
```
# display row in position 3
car_sales.iloc[3]
```

Out[15]:
```
Make                  BMW
Colour              Black
Odometer (KM)       11179
```

```
Doors                    5
Price            $22,000.00
Name: 3, dtype: object
```

In [16]:
```
# Display rows upto index 3
animals.iloc[:3]
```

Out[16]:
```
0      cat
3      dog
9    snake
dtype: object
```

In [18]:
```
# Display only Make column
car_sales["Make"]
```

Out[18]:
```
0    Toyota
1     Honda
2    Toyota
3       BMW
4    Nissan
5    Toyota
6     Honda
7     Honda
8    Toyota
9    Nissan
Name: Make, dtype: object
```

In [20]:
```
# Another way to display Make column
car_sales.Make
```

Out[20]:
```
0    Toyota
1     Honda
2    Toyota
3       BMW
4    Nissan
5    Toyota
6     Honda
7     Honda
8    Toyota
9    Nissan
Name: Make, dtype: object
```

In [24]:
```
# Only show the rows which is Made by Toyota
car_sales[car_sales["Make"] == "Toyota"]
```

Out[24]:

	Make	Colour	Odometer (KM)	Doors	Price
0	Toyota	White	150043	4	$4,000.00
2	Toyota	Blue	32549	3	$7,000.00
5	Toyota	Green	99213	4	$4,500.00
8	Toyota	White	60000	4	$6,250.00

In [25]:
```
# Only show the price of cars which is Made by Toyota
```

```
car_sales[car_sales["Make"] == "Toyota"]["Price"]
```

Out[25]:
```
0    $4,000.00
2    $7,000.00
5    $4,500.00
8    $6,250.00
Name: Price, dtype: object
```

In [26]:
```
# Only show the cars which has odometer > 100000
car_sales[car_sales["Odometer (KM)"] > 100000]
```

Out[26]:

	Make	Colour	Odometer (KM)	Doors	Price
0	Toyota	White	150043	4	$4,000.00
4	Nissan	White	213095	4	$3,500.00

In [ ]:
```

```