1.How to import pandas and check the version?¶

Import pandas as pd

Import numpy as np

Import seaborn as sns

Print(pd.\_\_version\_\_)

1.0.5

2. How to create a series from a numpy array?

Arr = np.array([1,2,3,4,5,6,7,8,9,10])

Sample\_series = pd.Series(arr)

Print(sample\_series)

1. 1
2. 1 2
3. 3
4. 3 4
5. 5
6. 5 6
7. 7
8. 7 8
9. 9
10. 9 10

Dtype: int32

3. How to convert the index of a series into a column of a dataframe?

Data = pd.DataFrame(arr)

Data[‘index’]=sample\_series.index

Data

Out[16]:

0 index

0 1 0

1 2 1

2 3 2

3 4 3

4 5 4

5 6 5

6 7 6

7 8 7

8 9 8

9 10 9

4. Write the code to list all the datasets available in seaborn library. Load the ‘mpg’ dataset

Sns.get\_dataset\_names()

[‘anagrams’,

‘anscombe’,

‘attention’,

‘brain\_networks’,

‘car\_crashes’,

‘diamonds’,

‘dots’,

‘exercise’,

‘flights’,

‘fmri’,

‘gammas’,

‘geyser’,

‘iris’,

‘mpg’,

‘penguins’,

‘planets’,

‘tips’,

‘titanic’]

Dataset = sns.load\_dataset(‘mpg’)

Dataset.head()

Mpg cylinders displacement horsepower weight acceleration model\_year origin name

0 18.0 8 307.0 130.0 3504 12.0 70 usa chevrolet chevelle malibu

1 15.0 8 350.0 165.0 3693 11.5 70 usa buick skylark 320

2 18.0 8 318.0 150.0 3436 11.0 70 usa plymouth satellite

3 16.0 8 304.0 150.0 3433 12.0 70 usa amc rebel sst

4 17.0 8 302.0 140.0 3449 10.5 70 usa ford torino

5. Which country origin cars are a part of this dataset?

Dataset[‘origin’].unique()

Array([‘usa’, ‘japan’, ‘europe’], dtype=object)

6. Extract the part of the dataframe which contains cars belonging to ‘usa’

Dataset[dataset[‘origin’] == ‘usa’]

Mpg cylinders displacement horsepower weight acceleration model\_year origin name

0 18.0 8 307.0 130.0 3504 12.0 70 usa chevrolet chevelle malibu

1 15.0 8 350.0 165.0 3693 11.5 70 usa buick skylark 320

2 18.0 8 318.0 150.0 3436 11.0 70 usa plymouth satellite

3 16.0 8 304.0 150.0 3433 12.0 70 usa amc rebel sst

4 17.0 8 302.0 140.0 3449 10.5 70 usa ford torino

… … … … … … … … … …

392 27.0 4 151.0 90.0 2950 17.3 82 usa chevrolet camaro

393 27.0 4 140.0 86.0 2790 15.6 82 usa ford mustang gl

395 32.0 4 135.0 84.0 2295 11.6 82 usa dodge rampage

396 28.0 4 120.0 79.0 2625 18.6 82 usa ford ranger

397 31.0 4 119.0 82.0 2720 19.4 82 usa chevy s-10

249 rows × 9 columns