## SIT719 Task 2.1 Sanket Thakur

## December 5, 2020

```
import pandas as pd
     import numpy as np
[4]: iris_data = pd.read_csv("https://archive.ics.uci.edu/ml/
      →machine-learning-databases/iris/iris.data", header=None)
[5]: iris_data
[5]:
            0
                 1
                       2
                            3
                                             4
                    1.4 0.2
     0
          5.1
               3.5
                                  Iris-setosa
     1
          4.9
               3.0
                    1.4 0.2
                                  Iris-setosa
     2
          4.7
               3.2
                    1.3 0.2
                                  Iris-setosa
          4.6
     3
               3.1
                    1.5
                          0.2
                                  Iris-setosa
                    1.4 0.2
          5.0 3.6
                                  Iris-setosa
     145
               3.0
                   5.2
                          2.3
                               Iris-virginica
          6.7
                               Iris-virginica
     146
         6.3
               2.5
                    5.0
                          1.9
     147
          6.5
                          2.0
                               Iris-virginica
               3.0
                    5.2
     148
         6.2
               3.4
                    5.4
                          2.3
                               Iris-virginica
               3.0
                    5.1
                          1.8
                               Iris-virginica
     [150 rows x 5 columns]
[8]: iris_data.
      -columns=['sepal_length', 'sepal_width', 'petal_length', 'petal_width', 'class']
[9]: iris data
[9]:
          sepal_length
                        sepal_width petal_length petal_width
                                                                            class
                   5.1
                                 3.5
                                                1.4
                                                             0.2
                                                                      Iris-setosa
                   4.9
                                 3.0
                                                             0.2
     1
                                                1.4
                                                                      Iris-setosa
     2
                   4.7
                                 3.2
                                                1.3
                                                             0.2
                                                                      Iris-setosa
                                 3.1
                                                             0.2
                                                                      Iris-setosa
     3
                   4.6
                                                1.5
     4
                   5.0
                                 3.6
                                                1.4
                                                             0.2
                                                                      Iris-setosa
     145
                   6.7
                                 3.0
                                                5.2
                                                             2.3
                                                                   Iris-virginica
     146
                   6.3
                                 2.5
                                                5.0
                                                             1.9
                                                                   Iris-virginica
```

	147	6.5	3.0	5.2	2.0	Iris-virginica								
	148	6.2	3.4	5.4	2.3	_								
	140					•								
	149	5.9	3.0	5.1	1.8	Iris-virginica								
	[150 rows x 5 columns]													
[10]:	<pre>iris_data.isnull().tail()</pre>													
[10]:	se	epal_length	sepal_width	petal_length	petal_width	class								
	145	False	False	False	False									
	146	False	False	False	False	False								
	147	False	False	False	False	False								
	148	False	False	False	False	False								
	149	False	False	False	False	False								
[11]:	iris_da	ata.loc[9:29	, 'petal_leng	th']= pd.np.Na	ıN									
	<pre><ipython-input-11-9f54047bc343>:1: FutureWarning: The pandas.np module is</ipython-input-11-9f54047bc343></pre>													
	deprecated and will be removed from pandas in a future version. Import numpy													
	directly instead													
	iris_data.loc[9:29, 'petal_length'] = pd.np.NaN													
	1115_(	uata.100[9.2	e, petal_ler	igui ]- pa.np.i	van									
[13]:	_	ata.isnull()	es, petal_ler	igui 1- puinpii	van									
	iris_da	nta.isnull()	•			class								
[13]: [13]:	iris_da	ata.isnull()	sepal_width	petal_length	petal_width									
	iris_da	ata.isnull() epal_length False	sepal_width False	petal_length False	petal_width False	False								
	iris_da	ata.isnull() epal_length     False False	sepal_width False False	petal_length False False	petal_width False False	False False								
	iris_da	epal_length False False False	sepal_width False False False	petal_length    False    False    False	petal_width False False False	False False False								
	iris_da se 0 1 2 3	epal_length False False False False	sepal_width False False False False	petal_length    False    False    False    False	petal_width    False    False    False    False	False False False False								
	iris_da se 0 1 2 3 4	epal_length False False False False False False False	sepal_width False False False False False	petal_length    False    False    False	petal_width    False    False    False    False    False	False False False False								
	iris_da se 0 1 2 3 4	epal_length False False False False False False False	sepal_width False False False False False	petal_length    False    False    False    False    False    False	petal_width    False    False    False    False    False    False	False False False False False								
	iris_da se 0 1 2 3 4 145	epal_length False False False False False False False False False	sepal_width False False False False False False	petal_length    False    False    False    False    False    False	petal_width    False    False    False    False    False    False False	False False False False False False								
	iris_da  se 0 1 2 3 4 145 146	epal_length False	sepal_width False False False False False False False	petal_length    False    False    False    False    False    False    False False	petal_width    False    False    False    False    False    False    False    False	False False False False False False False								
	iris_da  se 0 1 2 3 4 145 146 147	epal_length False	sepal_width False	petal_length    False	petal_width    False	False False False False False False False False False								
	iris_da se 0 1 2 3 4 145 146 147 148	eta.isnull()  epal_length False	sepal_width False	petal_length    False	petal_width    False    False	False								
	iris_da  se 0 1 2 3 4 145 146 147	epal_length False	sepal_width False	petal_length    False	petal_width    False	False False False False False False False False False								
	iris_da  se 0 1 2 3 4 145 146 147 148 149	eta.isnull()  epal_length False	sepal_width False	petal_length    False	petal_width    False    False	False								
	iris_da se 0 1 2 3 4 145 146 147 148 149	epal_length False	sepal_width False	petal_length    False    False	petal_width    False    False	False								
[13]:	iris_da  se 0 1 2 3 4 145 146 147 148 149 [150 ro	epal_length False	sepal_width False	petal_length    False    False	petal_width    False    False	False								

2

1.4

0.2

class

Iris-setosa

sepal\_length sepal\_width petal\_length petal\_width

3.5

[15]: iris\_data.fillna(10.0)

5.1

[15]:

0

1	4.9	3.0	1.4		0.2	Iris-setosa
2	4.7	3.2	1.3		0.2	Iris-setosa
3	4.6	3.1	1.5		0.2	Iris-setosa
4	5.0	3.6	1.4		0.2	Iris-setosa
• •	•••	•••	•••	•••		•••
145	6.7	3.0	5.2		2.3	Iris-virginica
146	6.3	2.5	5.0		1.9	<pre>Iris-virginica</pre>
147	6.5	3.0	5.2		2.0	Iris-virginica
148	6.2	3.4	5.4		2.3	Iris-virginica
149	5.9	3.0	5.1		1.8	Iris-virginica

[150 rows x 5 columns]

[]: