3/22/23, 11:46 PM A1_DatasetIris

```
In [ ]: #Fernando Gutierrez A01424790
         # Import the packages that we will be using
         import matplotlib.pyplot as plt
         import pandas as pd
         # Dataset url
         url = "/Users/fernando/Pictures/Escul/semanaTec_1/TC1002S/NotebooksProfessor/datasets/
         # Load the dataset
         dataset = pd.read_csv(url )
In [ ]:
         #print dataset
In [ ]:
         dataset
              5.1 3.5 1.4 0.2
Out[ ]:
                                Iris-setosa
           0 4.9 3.0 1.4 0.2
                                Iris-setosa
           1 4.7 3.2 1.3 0.2
                                 Iris-setosa
           2 4.6 3.1 1.5 0.2
                                Iris-setosa
           3 5.0 3.6 1.4 0.2
                                 Iris-setosa
           4 5.4 3.9 1.7 0.4
                                Iris-setosa
              ... ... ... ...
         144 6.7 3.0 5.2 2.3 Iris-virginica
         145 6.3 2.5 5.0 1.9 Iris-virginica
         146 6.5 3.0 5.2 2.0 Iris-virginica
         147 6.2 3.4 5.4 2.3 Iris-virginica
         148 5.9 3.0 5.1 1.8 Iris-virginica
        149 rows × 5 columns
In [ ]: #2 Print the number of rows
         #Fila, observacion o registro
         nCols = dataset.shape[0]
         print(nCols)
         149
In [ ]: #3 Print the number of columns
         nRows = dataset.shape[1]
         print(nRows)
         5
In [ ]: #4 How many observations are for each type of flower?
         dataset.loc[6]
         dataset['Iris-setosa'].value_counts()
```

```
Iris-versicolor
                            50
Out[ ]:
        Iris-virginica
                            50
        Iris-setosa
                            49
        Name: Iris-setosa, dtype: int64
In [ ]: #5 What is the type of data for each value
         dataset.dtypes
        5.1
                        float64
Out[]:
        3.5
                        float64
        1.4
                        float64
        0.2
                        float64
        Iris-setosa
                         object
        dtype: object
         #6 What are the units of each variable?
In [ ]:
```

Activity: work with the iris dataset

- 1. Load the iris.csv file in your computer and understand the dataset
- 1. How many observations (rows) are in total? 149
- 1. How many variables (columns) are in total? 5 What do they represent? Alto y ancho del petalo, alto y ancho del sepalo y el nombre del tipo de flor
- 1. How many observations are for each type of flower? Iris-versicolor 50, Iris-virginica 50, Iris-setosa 49
- 1. What is the type of data for each variable? alto y ancho tanto de petalo como sepalo son float, el nombre del tipo de flor como object
- 2. What are the units of each variable? el alto y ancho tanto de petalo como sepalo se encuentran en cm, el nombre, no tiene unidades