FEW TO USE IN ML

1. **Loading the Pima_Diabetes.csv Dataset and Displaying Initial Rows with Pandas**

import pandas as prince # Importing pandas with an alias

from pandas import Series

*# In `pandas`, a **Series** is a one-dimensional labeled array capable of holding any data type (integers, strings, floating-point numbers, Python objects, etc.). It is similar to a list or a column in a DataFrame but comes with additional functionality and is designed to work seamlessly with the `pandas` library.*

filename = 'C:/Users/Other USER!/Desktop/ML_PROJECT/pima_indians.csv'

dataset = prince.read_csv(filename)

dataset.head()

2. **To specify the number of rows to load from a CSV file in Pandas**

dataset.head(12)

3. **Using the .tail() function in pandas displays the last few rows of a DataFrame. By default, it shows the last 5 rows, but you can specify any number of rows you'd like to see.**

dataset.tail() # by default, shows the last 5 rows

dataset.tail(15) # shows the last 15 rows

4. **This attribute .shape is often used to understand the size of a dataset quickly.**

dataset.shape

*# If `dataset.shape` outputs `(768, 9)`, it means the DataFrame has **768 rows** and **9 columns**.*

5. The `dataset.info(memory_usage='deep')` function in **Pandas** provides detailed information about a DataFrame, including the memory usage of each column, with `'deep'` giving a more precise memory usage calculation.

dataset.info(memory_usage='deep')

6. The `dataset.columns` attribute in `pandas` returns an index object containing the names of all columns in the DataFrame.

dataset.columns

7. Allowing you to work with individual columns or arrays of data conveniently

old_column_names = Series(['Pregnancies', 'Glucose', 'BloodPressure'])

old_column_names # showing up with their index number (each column has own indece number)

8. Reads .csv file into a Pandas DataFrame while **specifically selecting certain columns** to import

dataset = pd.read_csv(filename, usecols=[3,6,7])

dataset.head()

9.

Resources used:

1. **Selecting columns when reading a CSV into pandas**

https://www.youtube.com/watch?v=_oFrH8FJ44I

2.