

Exercise Set 1a

Python Arrays & DataFrames

1 Task

1.
 - Create a Numpy array with 1 column and 100 rows. Fill this with some data of random numbers. You may utilize the random number functions `np.random.randn()` or `np.random.randint()` to generate random numbers.
 - Convert the above array into a pandas Series.
 - Next, create a Numpy array with 3 columns and 100 rows. Fill this with some data of random numbers.
 - Convert the above array into a pandas DataFrame. Note that a DataFrame has labels for each column. Choose some appropriate labels, such as X_1 , X_2 , X_3 .
 - Use the above generated DataFrame to do a pairplot. Utilize the Seaborn function `sns.pairplot()`.

1.1 AdditionalNotes

- At the top of the program, you want to import several libraries, as follows:

```
import numpy as np
import pandas as pd
import seaborn as sns
```
- You may utilize the posted code `ExampleScatterPlotSeaborn`.

2 Exercise Set Submission

The Exercise Set should be submitted in the provided link on Brightspace. It should include the following:

1. The Python source code.
2. A brief report describing what you did, including some results and plots.