

# Python syntax

In this example, to create a correlation matrix, we adopt the function *corr* on the well known *Iris* dataset. It contains some records about species of flowers. Then we built the output with the *heatmap* function. With commands *annot* and *annot\_kws* we can place correlation values and adjust the size.

```
#Import Libraries
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
from sklearn import datasets

#Import Iris dataset
iris = datasets.load_iris()
df = pd.DataFrame(iris.data, columns = iris.feature_names)

#Correlation matrix
fig, ax = plt.subplots(figsize = (10, 8))
sns.heatmap(df.corr(), annot = True, annot_kws = {'size':14})
```

# Output

The dataset *Iris* contains four numerical variables, we obtain a 4x4 real symmetric matrix. Out of principal diagonal, we find variables correlation and the color scale on right part highlights the of correlation.

