

```
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt

x = np.array([[5,3,2,1,4],[2,3,1,3,1],[3,10,5,10,2],[1,5,10,5,1],[1,3,3,4,1]])
h = np.array([[10,5,10,5,10],[5,10,5,10,5]])

df = pd.DataFrame(x.T)
df
```

	0	1	2	3	4
0	5	2	3	1	1
1	3	3	10	5	3
2	2	1	5	10	3
3	1	3	10	5	4
4	4	1	2	1	1

Next steps:

Generate code with df

View recommended plots

```
df1 = pd.DataFrame(h.T)
df1
```

	0	1
0	10	5
1	5	10
2	10	5
3	5	10
4	10	5

Next steps:

Generate code with df1

View recommended plots

```
cov = []
for column in df.columns:
    x = np.sum(df[column])
    x2 = np.dot(df[column],df[column])
    n = len(df[column])
    l =[]
    for column1 in df1.columns:
        y = np.sum(df[column1])
        xy = np.dot(df[column],df1[column1])
        y2 = np.dot(df1[column1],df1[column1])
        r = (n*xy - x*y)/np.sqrt((n*x2 - x*x)*(n*y2 - y*y))
        l.append(r)
    cov.append(l)
cov

[[1.539107682722815, 1.2871918058696765],
 [1.1451966686277364, 1.8786728732554483],
 [0.827044292141902, 1.5623182788174912],
 [0.801519108892418, 0.9777286923534022],
 [1.0456345194519838, 1.6569980994331448]]
```

Start coding or generate with AI.

