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2.936323586052903

```
from notebookfuncs import *
from GenExact import *
import numpy as np
# Define a vector of means and a matrix of covariances
mean = np.array([3, 3])
Sigma = np.array([[1, 0.70],
           [0.70, 1]])
array([[1. , 0.7],
       [0.7, 1.]])
rng = np.random.RandomState(0)
x1 = gen_exact(mean=mean,sigma=Sigma,size=(100),rng=rng);
np.cov(x1,rowvar=False,bias=True)
array([[1. , 0.7],
       [0.7, 1.]])
np.mean(x1)
3.0
rng = np.random.RandomState(0)
x2 = gen_inexact(mean=mean,sigma=Sigma,size=(100),rng=rng);
np.cov(x2,rowvar=False,bias=True)
array([[1. , 0.7],
       [0.7, 1.]])
np.mean(x2)
```

np.allclose(x1,x2)

False

allDone();

<IPython.lib.display.Audio object>