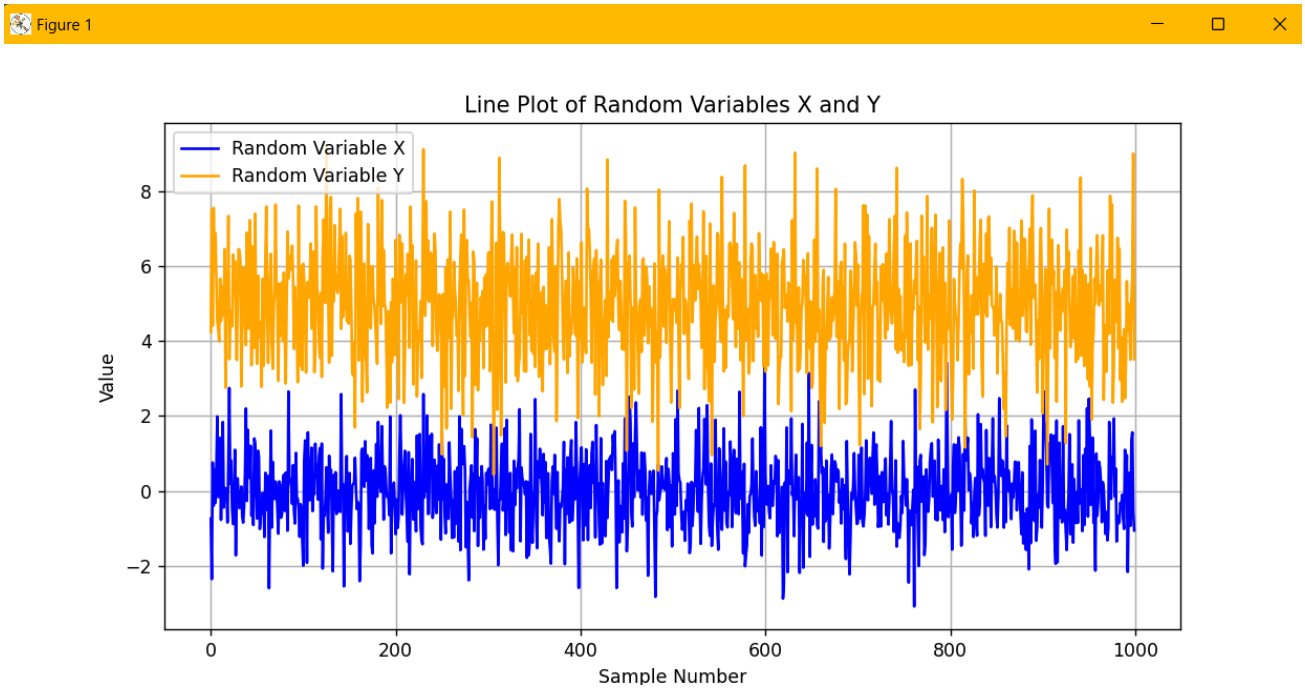
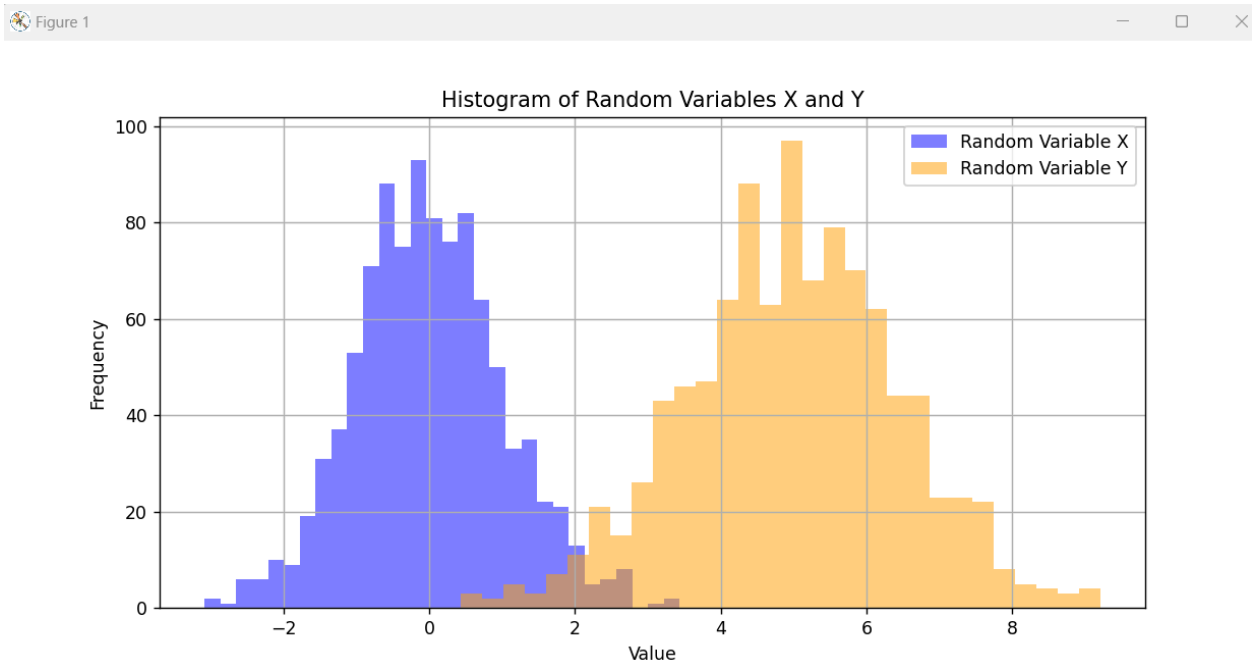
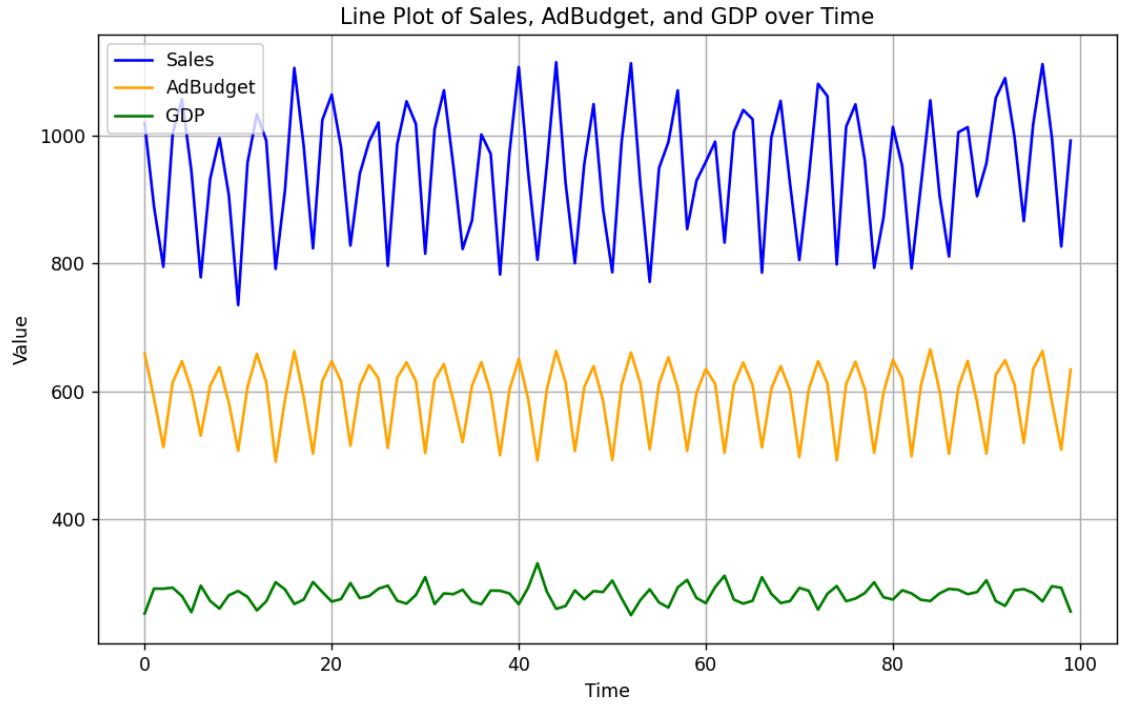
Visualization of Complex
Data DATS 6401
LAB # 1

Author: Khush Shah(G23239366)

1. Created a definition to get the inputs of the value of mean, variance, and number of observations from the user.
2. Created a function to calculate the Pearson correlation coefficient from the calculated means.
3. The sample mean of random variable x is: 0.00
   The sample mean of random variable y is: 4.97
   The sample variance of random variable x is: 1.03
   The sample variance of random variable y is: 2.14
   The sample Pearson's correlation coefficient between x & y is: -0.01
4. 

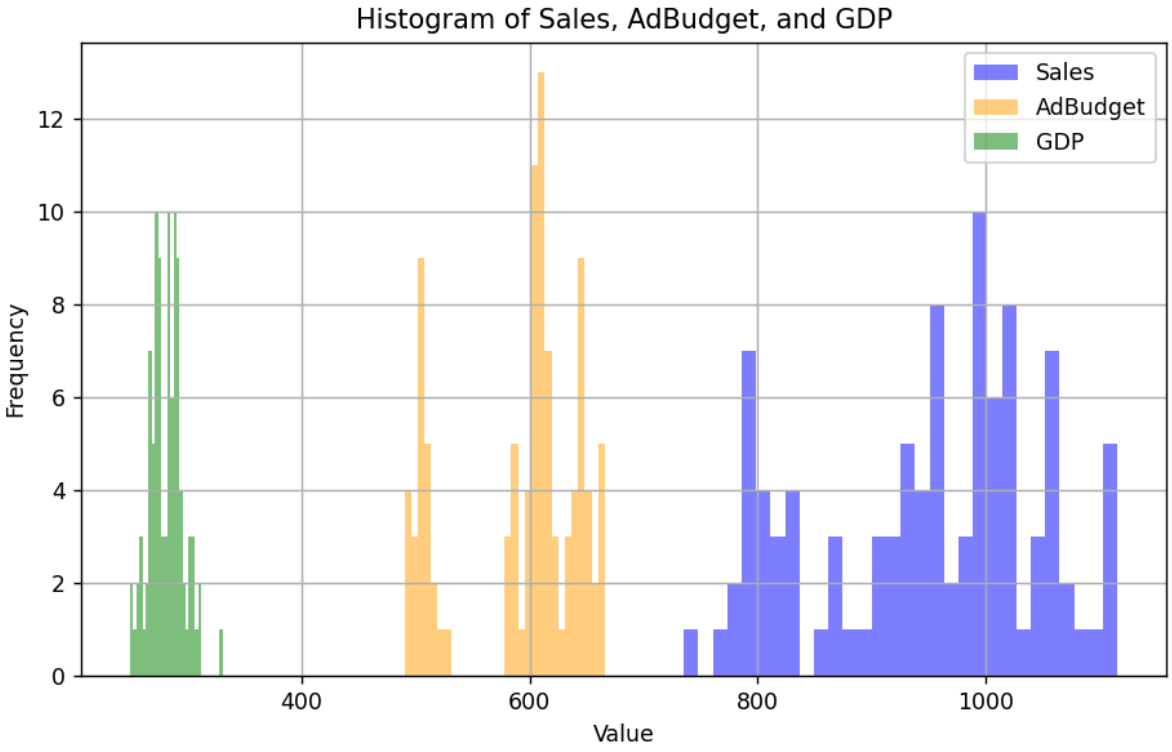


5.
6. Imported the dataset from Git Hub.
7. Calculated the coefficient for the required columns using the developed function.
8. The sample Pearson's correlation coefficient between Sales & AdBudget is: 0.91
   The sample Pearson's correlation coefficient between Sales & GDP is: -0.64
   The sample Pearson's correlation coefficient between AdBudget & GDP is: -0.77



9.

10.


Histogram of Sales, AdBudget, and GDP
Sales
AdBudget
GDP
Frequency
Value
0
2
4
6
8
10
12
400
600
800
1000