

Assignment 1 – Mean, Covariance of Multivariate Data

Question 1 – Using the Excel file dataA.xlsx, which contains a 500x3 data matrix (500 data points with 3 attributes), calculate both the mean and the covariance matrix.

Question 2 - Using the Excel file dataB.xlsx, which contains a 500x10 data matrix (500 data points with 10 attributes), calculate both the mean and the covariance matrix.

Question 3 – The data generated is random and normally distributed with a mean for dataA, dataB and covariance for dataA and dataB given in meanA.xlsx, meanB.xlsx, covarianceA.xlsx and covarianceB.xlsx respectively. Briefly explain why your answers are different from the parameters used to generate the data.