Project #7   Principal Component Analysis
Due Tuesday November 16th

Principal Components

(a) Implement the principal components transform discussed in Section 11.4 of Gonzalez & Woods. The objective is to be able to use Eqs. (11.4-11) and (11.4.-12). You will need routines to compute the eigenvalues and eigenvectors of the covariance matrix.
(b) **Download** Figs. 1.10(1) through 1.10(6) and duplicate the sequence of operations described in Example 11.10, including the images and tables. It is not necessary to duplicate Fig. 11.27.

References:
See GWE, Section 11.5 for detailed explanations of how to compute a covariance matrix of a vector population, and how to perform principal component analysis.