This homework assignment focuses on Principal Components Analysis (PCA). You will provide a written analysis based on the following information:

- First, download the compressed data from the U.S. Bureau of Labor Statistics (BLS) at http://www.bls.gov/cew/data/files/2014/csv/2014_annual_singlefile.zip, and extract the .csv file.
- Run Principal Components Analysis on the BLS data and answer the following questions (You can use any PCA function you wish, i.e. princomp(), prcomp(), principal() or by hand.):
    - Questions:
        1. What proportion of the total variation in the data is explained by each of the principal components?
        2. What happens when you plot a screeplot?
        3. Based on the variation explained for each of these components, which, if any, components would you use? Why?
        4. Is there evidence of clustering in the data by creating biplots of the each of the components plotted against one another? Why or why not?
        5. Do any of the biplots reveal any interesting structure?
        6. How many pcs are required to explain 75% of the variance in the data?