ISTA 350 Cities Worksheet Name:

Scrape `'http://www.arizona-demographics.com/cities_by_population'`. Pull up the page for reference. Make it into a soup object. It has only one table. The first row is a header. All of the remaining rows contain three table data: an integer, a city name, and a population (an int). Make a list of lists. It should have inner lists, one for each of rows 1 – 4 in the website's table (skip the header row, row 0). Load the population for each of rows 1– 4 into the corresponding inner list (each inner list will be of length 1). Don't forget your imports. Recall that `soup.find_all(element)` returns a list of all of those elements.

Some data from the web based on the 2010 census:

Phoenix	1,513,367	Los Angeles	3,884,307	Albuquerque	556,495
Tucson	526,116	San Diego	1,355,896	Las Cruces	101,324
Mesa	457,587	San Jose	998,537	Rio Rancho	91,956
Chandler	249,146	San Francisco	837,442	Santa Fe	69,976

Write code that creates a DataFrame holding some of the information above. Column labels should be state abbreviations, row labels should be city rank (1, 2, etc.), and the data should be the populations (notice I make no mention of city names). Don't forget your imports.

Use the `iloc` attibute to grab a view onto the first two rows. Then do it using the `loc` attribute. Then grab a corresponding slice of just the underlying array.

Write code to calculate the mean of the most populous cities in each state (the first row). Calculate the population std for the Arizona cities (the first column).