

# Week 2 - Assignment

**Due** Monday by 11:59pm    **Points** 7    **Submitting** an external tool

## Identifying Relationships Between Variables

[WLOs: 1, 3, 4, 5, 6] [CLOs: 2, 5]

Prior to beginning work on this assignment, read Chapter 4 of your textbook, including the “Cost of Living Brief Case” at the end of Chapter 4 on page 143, and access the Numbeo [Cost of Living](https://www.numbeo.com/cost-of-living/) (<https://www.numbeo.com/cost-of-living/>) webpage.

In this assignment, you will be analyzing the cost of living in any U.S. city and creating a scatterplot to identify the relationships between variables. You may want to choose the city you live in, the city you were born in, or a city you may be interested in moving to in the future.

Go to the Numbeo [Cost of Living](https://www.numbeo.com/cost-of-living/) (<https://www.numbeo.com/cost-of-living/>) web page. In the “Select City” search box, type in the name of your city until it appears in the drop-down menu. Select your desired city. Note: For an accessible version of cost of living data, please contact your instructor.

A summary, along with cost of living index for the city you selected, will be displayed in the box at the top of the page. You will also see a breakdown of items with their associated cost. The first column is the item name, the second column is the cost of the item in your city, and the third column is the range of the cost for that item.

For this assignment, you need the first data item for each category and associated cost listed in the second column. For example, for “Utilities (Monthly),” choose the value for the first item under it—i.e., “Basic (Electricity, Heating, Cooling, Water, Garbage) for 915 sq ft Apartment.” For “Rent Per Month,” choose the value for the first item under it—i.e., “Apartment (1 bedroom) in City Centre.”

It is recommended that you use Excel to compile and analyze the data. Instructions for using Excel and other tools are on pages 139 to 142 of your text. However, you are welcome to use the tool of your choice.

Choose the following categories from the list (in your paper, call them 1–5 as listed below) and the numeric data from the first item listed in the dataset:

1. Utilities (Monthly)
  - Basic utilities (electricity, heating, cooling, water, garbage) for 915 square foot apartment
2. Sports and Leisure