Homework #1 (Due September 10, 3:30 p.m.)
STAT-UB.0003: Regression and Forecasting Models

For this assignment, you will need to use a z table and a t table. These are available in Appendix D of your textbook, as Tables 2 and 3.

1. McClave, Benson, & Sincich (MBS), Ex. 5.26
2. MBS, Ex. 5.32.
3. MBS, Ex. 6.12.
4. MBS, Ex. 6.27, parts (a–b). You can use Minitab, Excel, or a calculator to compute the mean and standard deviation.
5. Obtain the "NormTemp" dataset from the course website. This gives data on body temperatures for 130 randomly selected human subjects.
   (a) What is a reasonable population for this dataset?
   (b) Using Minitab, get a confidence interval for the population mean temperature. To do this, first read the data set into Minitab, and then use
   $$\text{Stat} \Rightarrow \text{Basic Statistics} \Rightarrow \text{1-Sample } t$$
   The variable you need to use is *Temp*. Ask for a confidence interval with level 95.0. Copy and paste the Minitab output.
   (c) What assumptions do you need for the confidence interval to be valid?
   (d) Are the results of the confidence interval surprising, in view of the fact that the population mean temperature is supposed to be 98.6 degrees?