Hw2

1. ATMOSPHERIC PRESSURE: In the XIX century Forbes and Hooker measured the atmospheric pressure and the boiling temperature of water at various altitudes, with the goal of building a model for pressure using that temperature. Forbes did his experiments in the Alps and Hooker in the Himalayas, which explains the difference in range of boiling temperatures. Data can be found in $ForbesHooker0.csv$.

   Build two models for pressure as a function of temperature using these two samples separately.

   (How would you decide whether the two fitted models can be considered to be coming from the same population model?)

2. WOOD VOLUME: Predict the volume of a black cherry tree trunk from its height and its diameter, using data in $Wood0.csv$.

   Tackle the modeling problem first empirically, as if you did not know anything about volumes of cones and cylinders, and then try to beat the model found in that way by using what you remember about them.

   Can you think of a way of testing what you know about volumes of cones and cylinders through the fit of an "empirical" model to this set of data?