Handout 1.2: Introduction to Hypothesis Testing

Dr. Bean - Stat 5100

Determine whether or not the following statements are true or false:

- **The p-value is the probability that the null hypothesis is true.**
- **We reject a null hypothesis when the p-value is small.**
- **If the p-value is very small, it is not possible that the null hypothesis is true.**
- **The difference between the sample mean and the population mean is all that matters in the test statistic.**

What is the different between a practical difference and a "significant" difference?

Can you think of an example when our primary motive for creating a model is to create accurate predictions? How about an example where the primary motive is determining the significance of the coefficients?