While the Belize dataset is not normally distributed, act as if it is for the purposes of the homework.

1. Why is assuming normal data an important consideration when answering questions about probability?
2. Create two histograms in a subplot (vertical or horizontal is fine) that show the distribution of reviews\_per\_month and number\_of\_reviews in Belize Airbnb data
   1. How do you choose your bin size?
3. Create a box and whisker plot for availability\_365. What does this show you?
4. What is the probability that the price for an Airbnb is under $50?
   1. What do you notice about these records? Hint: look at the other columns.
   2. What distribution does this data most closely fit?
5. Calculate the sample variance and standard deviation for all the numerical columns in the same output.
   1. Why sample variance and not population variance?
   2. What is your takeaway for each metric?
   3. What are the scales of measurement for each of these values?
6. What percent of Airbnb listings in Belize are available 360 days a year or more?
   1. 360 days or less?
   2. What distribution does this data most closely fit?
7. What minimum night count are 75% of Airnbnb listing in Belize greater than?
8. Explain The Monty Hall problem in your notebook in markdown in under 250 words.