**Week 1 Assignment**

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DSC 520: Statistics for Data Science

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**Week 3 Assignment 2**

1. ID (chr), ID2 (int), Geography (chr), PopGroupID (int), Popgroup.display.label (chr), RacesReported (int), HSDegree (num), BachDegree (num)
2. Graphical user interface, text

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3. Chart, histogram

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4. Answer the following questions based on the Histogram produced:
   1. Unimodal Distribution
   2. Asymmetrical
   3. Not bell shaped
   4. Not normal distribution
   5. Skewed to the right
   6. Chart, histogram

      Description automatically generated
5. Chart, line chart

   Description automatically generated
6. Answer the following questions based on the Histogram produced:
   1. The distribution is not normal because it is negatively skewed and the mean, median, and mode are not aligned.
   2. The distribution is skewed to the right (negative) because there is a higher probability for higher percentages of high school graduates.
7. Table

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8. Since the mode is larger than the median, which is larger than the mean, we know the data is skewed to the right (or negatively skewed). With a kurtosis of approximately 4.353, the distribution is leptokurtic and has a higher peak. As the sample size increases the value of skewness and kurtosis will decrease, and vice versa. Since n > 30, the effect of increasing the sample size won’t be as significant as if we were to greatly reduce the sample size.

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