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Central Tendency: Understanding Mean, Median, and Mode

1. The Mean: arithmetic average
   1. Average = sum all data points / number of data points
   2. Gives good general benchmark of typical value
   3. BEWARE OF OUTLIERS
      1. Outliers can majorly skew Mean, so be careful to filter them out when using Mean to provide insights
2. The Median: middle value
   1. Middle value in a sorted data set
   2. Particularly useful when dealing with skewed distributions or datasets containing outliers
3. The Mode: most frequent value
   1. Value that appears most frequently in a dataset
   2. Particularly useful when analyzing categorical data or when trying to identify the most common observation in a dataset.

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Exploring Range With a Practical Example – see MySQL script

1. Range
   1. simple measure of variability
   2. calculated as difference between max and min values in a dataset