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Week 1 - Exercise 1.2
DSC520 – Statistics for Data Science
Professor Chase Denton
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GitHub Link: git@github.com:dbdev-smith/SMITH-DSC520_hello-world.git

Task 3: What is the level of measurement of the following variables:

a. The number of downloads of different brands' songs on iTunes.
   Classification: Discrete, Ratio
   Reasoning: The entire song needs to be downloaded for the count to make sense. There may be a brand with zero downloads.

b. The names of the brands that were downloaded.
   Classification: Nominal
   Reasoning: More than one brand exists but has no logical order.

c. The position in the iTunes download charts.
   Classification: Ordinal
   Reasoning: A logical order exists within the chart.

d. The money earned by the bands from the downloads.
   Classification: Continuous, Ratio
   Reasoning: Currency has a distinct value and can be broken down into smaller increments.

e. The weight of drugs bought by the bands with their royalties.
   Classification: Continuous, Ratio
   Reasoning: Has a distinct value that can be broken down into smaller increments.

f. The types of drugs bought by the bands with their royalties.
   Classification: Categorical, Nominal
   Reasoning: There are several different drugs, and their name has meaning.

g. The phone numbers that the bands obtained because of their fame.
   Classification: Categorical, Nominal
   Reasoning: The band received phone numbers from multiple people.

h. The gender of the people giving the bands their phone numbers.
   Classification: Categorical, binary
   Reasoning: Gender can be either male or female.

i. The instruments played by the band members.

Classification: Categorical, Nominal
Reasoning: The instrument names have meaning.

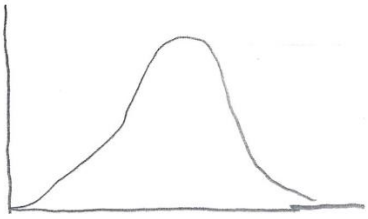
j. The time they had spent learning to play their instruments.
Classification: Continuous, Ratio
Reasoning: Time could be 0 or broken down into smaller increments.

Task 4: Measurement of error in the friend's CD-counting device is: 6

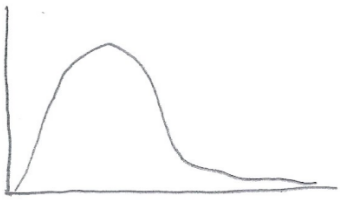
Showing work:
863 – 857 = 6

Task 5:

Normal Distribution:



Positively Skewed Distribution"



Negatively Skewed Distribution: