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

1. The number of downloads of different bands’ songs on iTunes. **Interval**
2. The names of the bands that were downloaded. **Nominal**
3. The position in the iTunes download chart. **Ordinal**
4. The money earned by the bands from the downloads. **Ratio**
5. The weight of drugs bought by the bands with their royalties. **Ratio**
6. The type of drugs bought by the bands with their royalties. **Nominal**
7. The phone numbers that the bands obtained because of their fame. **Nominal**
8. The gender of the people giving the bands their phone numbers. **Binary**
9. The instruments played by the band members. **Nominal**
10. The time they had spent learning to play their instruments. **Ratio**

Task 4: Say I own 857 CDs. My friend has written a computer program that uses a webcam to scan the shelves in my house where I keep my CDs and measure how many I have. His program says that I have 863 CDs. Define measurement error. What is the measurement error in my friend’s CD-counting device?

**“Measurement error is the discrepancy between the numbers used to represent the thing we’re measuring and the actual value of the thing we’re measuring (Field)”. The measurement error is 6 CDs.**

Task 5: Sketch the shape of a normal distribution, a positively skewed distribution and a negatively skewed distribution.

**See Below**

Shape

Description automatically generated with medium confidenceShape

Description automatically generated with low confidenceA picture containing line chart

Description automatically generated

Field, Andy; Miles, Jeremy; Field, Zoe. Discovering Statistics Using R (p. 31). SAGE Publications. Kindle Edition.

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