

Repository link:

<https://github.com/tang-xin72/hello-world>

Discovering Statistics Using R

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

- a. The number of downloads of different bands' songs on iTunes. **Ratio variable**
- b. The names of the bands that were downloaded. **Nominal variable**
- c. The position in the iTunes download chart. **Ordinal variable**
- d. The money earned by the bands from the downloads. **Ratio variable**
- e. The weight of drugs bought by the bands with their royalties. **Ratio variable**
- f. The type of drugs bought by the bands with their royalties. **Nominal variable**
- g. The phone numbers that the bands obtained because of their fame. **Nominal variable**
- h. The gender of the people giving the bands their phone numbers. **Binary variable**
- i. The instruments played by the band members. **categorical variable**
- j. The time they had spent learning to play their instruments **Ratio variable**

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?

Answer: In this example, the measurement error is the difference between the actual CD count and the program reading result. The measurement error in count device is 6.

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

