

Week 1 - Exercise 1.2

3. Github Repository - <https://github.com/meenakshishankara/hello-world>

4. Task 3 – What is the level of measurement of the following variables?

a. The number of downloads of different band's songs on iTunes:

Answer: Discrete Variable – since number of downloads is a whole number.

b. The names of the bands downloaded –

Answer: Nominal Variable - as two or more bands may have the same name and so this variable may not be very meaningful.

c. The position in the iTunes download chart –

Answer: Ordinal Variable – the position in the download chart is generally in the order of popularity indicating that the higher the order, higher the number of downloads. But this may not give the exact number of downloads.

d. the money earned by the bands from the downloads –

Answer: Continuous variable – since the amount can be any monetary value on the scale.

Ratio variable – since it is proportionate to the number of downloads.

e. The weight of drugs bought by the bands with their royalties –

Answer: Continuous variable – the weight can be any value on the scale.

f. The type of drugs bought by the band with their royalties –

Answer: Nominal variable – Two or more bands may buy the same drugs.

Categorical variable – Drugs bought may be of a certain category.

g. The phone numbers that the bands obtained because of their fame –

Answer: Nominal Variable - Phones number may not provide any valuable information about their fame.

h. The gender of the people giving the bands their phone numbers –

Answer: Binary variable – Fans may be either Male or Female.

i. The instruments played by the band members –

Answer: Nominal variable – two people can play same instruments.

Categorical variable – distinct instrument categories

j. The time they had spent learning their instruments –

Answer: Continuous Variable – the hours spent can be any value on the scale.

Ratio variable – the hours each had spent may be comparable/proportionate.

Task 4 - Measurement Error – The discrepancy between the actual value of a thing and the value obtained through a measurement process of the thing is called the measurement error.

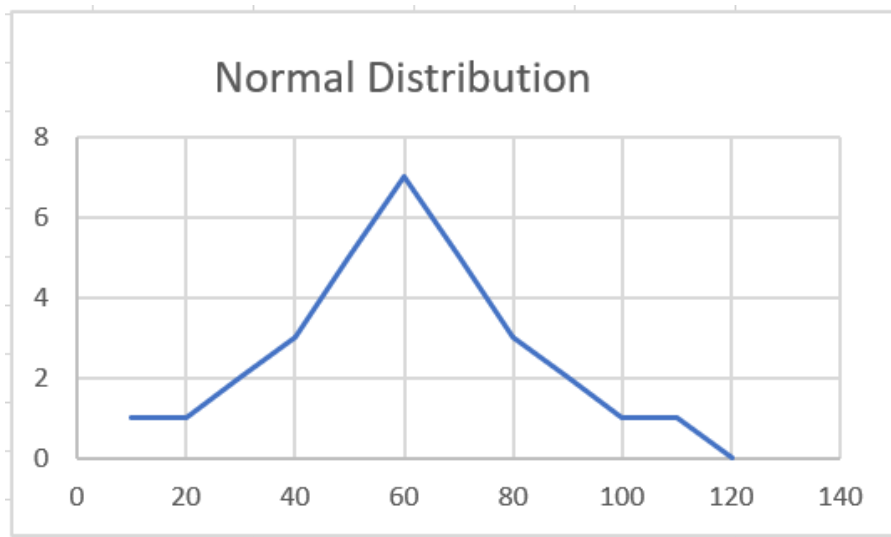
Here – The actual number of CDs is 857.

The program calculated the number as 863.

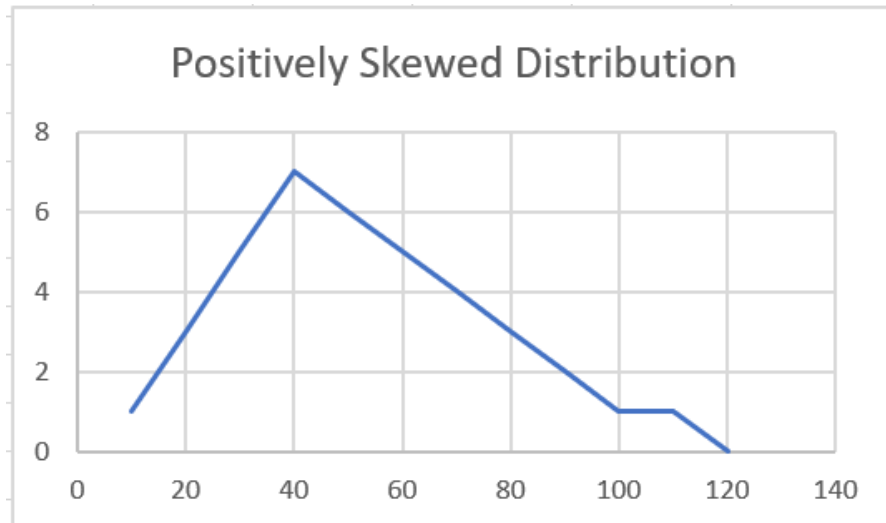
Therefore, the measurement error is +6.

Task 5 - Sketch the shape of

Normal Distribution –



Positively Skewed Distribution –



Negatively Skewed Distribution –

