Frequently Asked Questions

1. Is it possible to generate a frequency distribution table without arraying the raw data

A) It is always better to first array or arrange the data in a specified format before generating a Frequency Distribution table in order to ensure that there are no mistakes in counting the data points and generating a class interval

2. Is it possible to convert an Inclusive Series to Exclusive series

A) Yes, it is possible to convert an Inclusive Series to Exclusive series and vice-versa using a correction factor .5 which is added to the lower limit and deducted from the upperlimit.

3. Is there a fixed formula to generate a class interval

- A) There is a formula to generate the class interval typically it is taken as the difference between the highest data point and the lowest data point – divided by the total number of points. It is possible to change the class intervals depending on the convenience of representation.
- 4. While creating a Frequency distribution table, is it mandatory to start with the lowest and highest value to calculate a range
 - A) It is important to take the entire range of data into considerations and use the lowest and upper limits of the data points to generate a Frequency distribution table. If you use data beyond the limits, there would be zero frequency count and wasteful representation of data, which can be avoided.

5. Can I have a frequency table with any upper and lower limit which have overlapping ranges

- A) No it is not advisable to have a class range with overlapping ranges except for the upper/lower limit in Inclusive or Exclusive series. Using such an overlap will skew the frequency count and impact the data analysis leading to erroneous interpretation.
- 6. By generating Frequency distribution table, can you assume that the data is consistent and free of errors.
 - A) If the raw data is erroneous or inconsistent, the technique of Frequency distribution table does not help in removing such inconsistencies or errors.
- 7. While using Frequency distribution mechanism, do we lose the data by compressing the data points
 - A) No we do not lose any data by compressing the data points since we are only reducing the number of data points and not losing or leaving out any specific data as such.
- 8. Can we have fractions and whole numbers as data points in a Frequency distribution table
 - A) It is ok to have fractions and whole numbers as data points; however the class intervals will become cumbersome to track, count and analyze.

9. In a series with class intervals 10-20, 21-30 and so, what will happen if the data value is 20.5

A) In cases where we have data points with decimal points or intermediate values, it is better to use Less Than or More than table. For ex. In the above case we would use the range/class intervals as < 20, <30 and so on where in 20.5 would fit in the second class. Alternatively we can also use 10-20, 20-30, 30-40 and so on, where in 20.5 would fit in the second range. However we need to use the same rule with consistency

10. When should one use Less than or More than concept in Frequency distribution

- A) When you want to represent a table using cumulative count instead of absolute count, it is good to use the concept of Less than or More than. For ex. In a school the Principal would like to know how many students got more than 75% or Less than 35% overall to decide the Fail % and Distinction %.
- 11. Is it mandatory to have only ranges with class intervals or can we have a mix of Less than, more than and class ranges
 - A) It is not mandatory to have only ranges or only less than/more than. For ex in the example of Logical grouping in the course material, a school decides to classify the data as those with Less than 35 are Fail cases, More than 75% are First class with Distinction and the range between 35 and 75 is classified into 3 class intervals to determine 3rd, 2nd and 1st class ranks.