Number of Class Intervals The decision on the number of class intervals or groups depends largely on the judgment of an investigator and/or the range that will be used to group the data. As a general rule, a frequency distribution should have at least five class intervals (groups) but not more than 15. The following two rules are often used to decide approximate number of classes in a frequency distribution:

(i) If k represents the number of class intervals and N is the total number of observations, then the value of k will be the smallest exponent of the number 2, so that $2^k \geq N$. In Table 2.3, we have $N = 30$ observations. If we apply this rule, then we shall have