Summary

- Total number of samples that we draw from different strata should be in such a way that $\sum n_h = n$.
- The selection of the sample sizes(n_h) from each stratum can be done using the following 2 methods:
    - Proportional allocation
    - Optimum allocation(Neyman's allocation)

- If the sample size in the h^{th} stratum i.e., $n_h \propto N_h$ then the sample is said to have been selected under Proportional allocation.
- Under Proportional Allocation the sample sizes of each stratum can be determined using the formula

$$n_h = \frac{N_h}{N} * n$$

- If the sample size in the h^{th} stratum is directly proportional to the product of the population size in the h^{th} stratum and the population root mean square in the h^{th} stratum i.e., $n_h \propto N_h S_h$ then the sample is said to have been selected under Optimum allocation or Neyman's allocation.
- Under Optimum or Neyman's Allocation the sample sizes of each stratum can be determined using the formula:

$$n_h = \frac{n}{\sum N_h S_h} \cdot N_h S_h$$