What is non-probability sampling methods?

- **1. Convenience Sampling:** This method involves selecting the most readily available individuals or items as the sample. It is often the simplest and least expensive approach, but it can lead to bias because it may not represent the entire population.
- **2. Judgmental or Purposive Sampling:** In this method, the researcher selects specific individuals or items based on their expertise and judgment about who or what should be included in the sample. This approach is subjective and may introduce bias.
- **3. Snowball Sampling:** This technique is often used in situations where it is challenging to identify or access members of a particular group or population. The researcher starts with one or a few known individuals and then asks them to refer other potential participants. It is commonly used in studies involving hidden or marginalized populations.
- **4. Quota Sampling:** Quota sampling divides the population into subgroups or strata based on certain characteristics (e.g., age, gender, income). The researcher then selects individuals from each subgroup until they reach a predetermined quota. While it ensures diversity in the sample, it does not guarantee randomness within the subgroups.
- **5. Volunteer or Self-selection Sampling:** In this method, individuals voluntarily choose to participate in the study. This often leads to a biased sample because those who volunteer may differ in important ways from those who do not.

- **6. Purposive or Expert Sampling:** Researchers select participants based on specific criteria or expertise, often used in qualitative research or cases where knowledge is required.
- **7. Convenience Sampling:** This method involves selecting the easiest-to-reach individuals or elements from the population, such as surveying people passing by on the street. It is convenient but may lead to biased samples.

Types of data distribution and types of density function?

- 1- Normal Distribution
- 2- Standard Normal Distribution
- 3- Student t Distribution
- 4- Chi-Square Distribution
- 5- Continuous Uniform Distribution