

Intermediate Statistics Assignment Question

1. Why we have $n-1$ in the denominator in the sample variance?

- We use $n-1$ in the denominator so that we can have the population (N) variance and sample (n) variance approximately equal/same.
- If we try to use n the population (N) variance and sample (n) variance may have vast difference

2. What is the relationship between mean, median, mode for left and right skewed log normal distribution?

- **Left skewed** – $\text{mean} > \text{median} > \text{mode}$
- **Right skewed** – $\text{mean} < \text{median} < \text{mode}$