

Time Series Assignment 1

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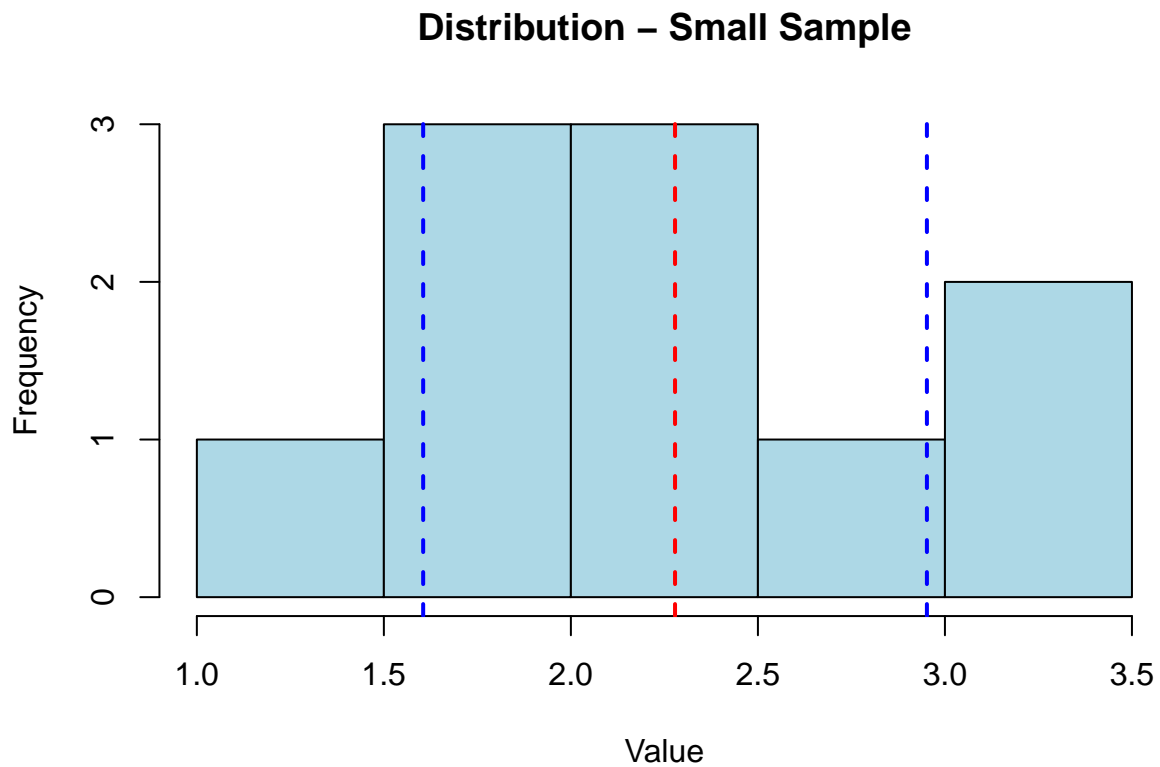
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Assignment 1

Making the small sample

```
set.seed(100)

sample_q5_small=rnorm(10, mean = 2.3, sd=1.2)
small_sample_mean=mean(sample_q5_small)
small_sample_sd=sd(sample_q5_small)
```

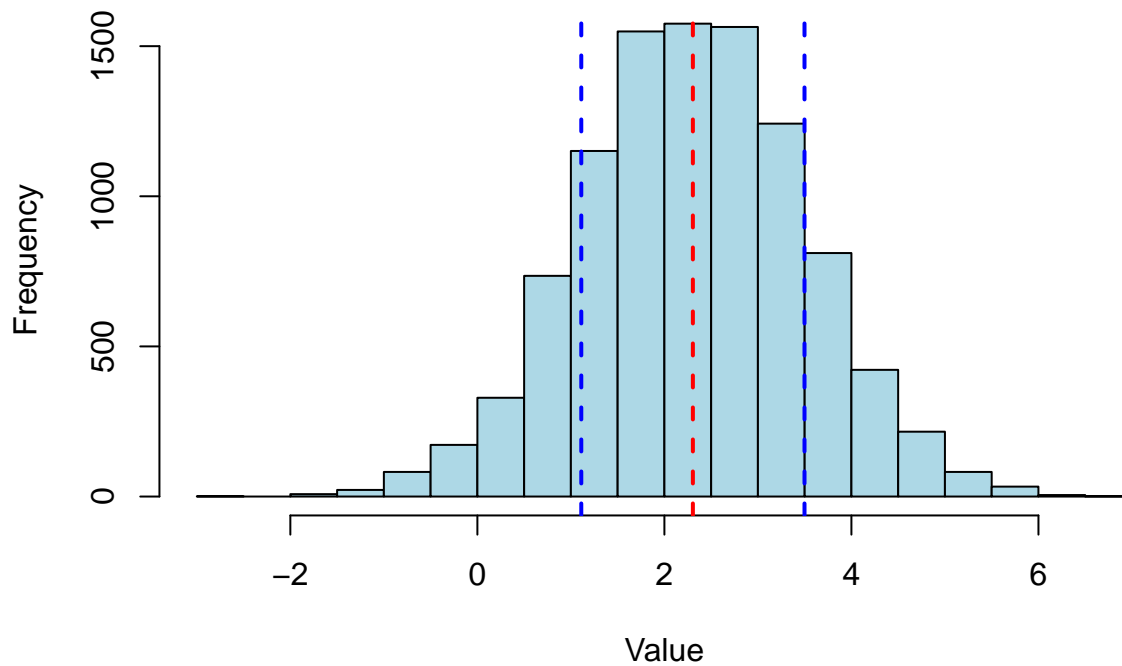


Expanding Sample Size to 10_000

```
set.seed(100)

sample_q5_big=rnorm(10000, mean = 2.3, sd=1.2)
big_sample_mean=mean(sample_q5_big)
big_sample_sd=sd(sample_q5_big)
```

Distribution – 10000 Sample



Larger samples tend to provide more accurate estimates of population parameters. Increasing the sample size from 10 to 10,000 can improve the precision of the estimated sample mean and sample standard deviation. The larger sample size allows for a better representation of the underlying distribution and reduces the impact of random fluctuations

Sample Mean and SD from sample size of 10000 would be more reliable estimates