

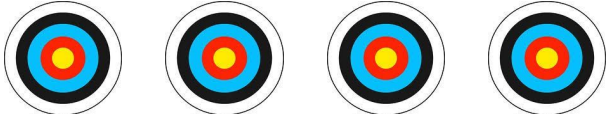
Time Series Stationarity

Time Series Stationarity

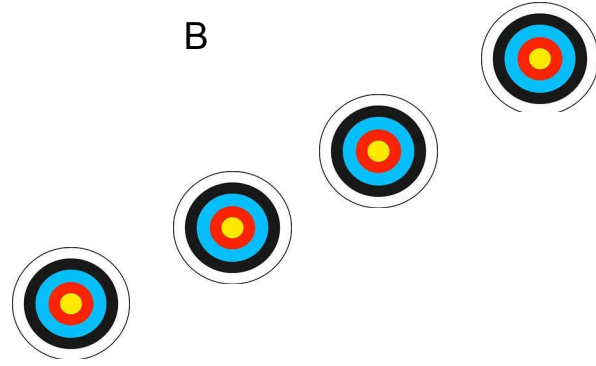
Game of Archery



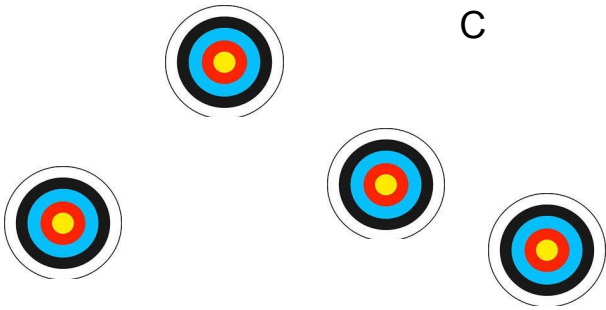
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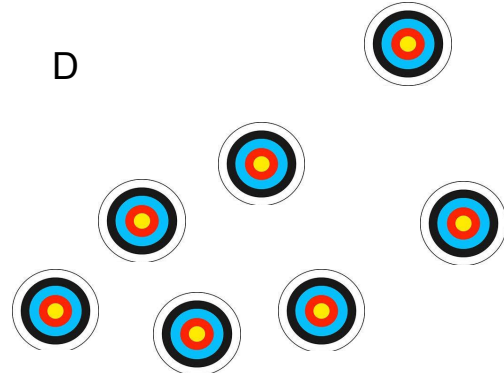
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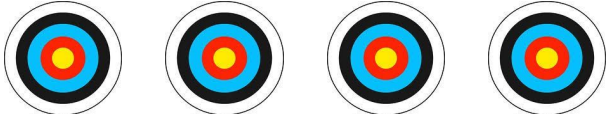
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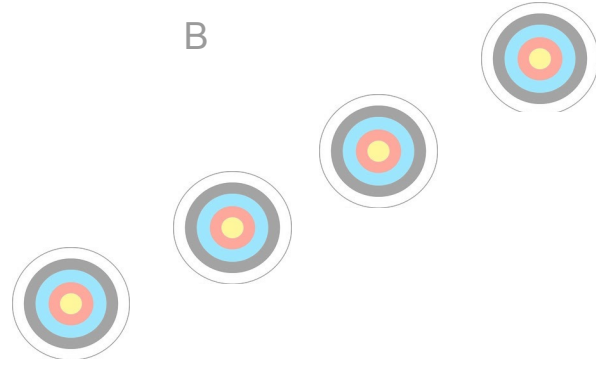
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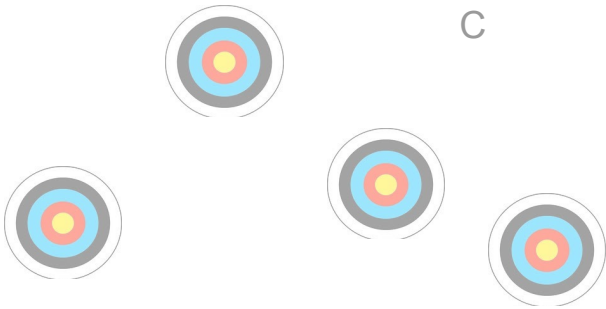
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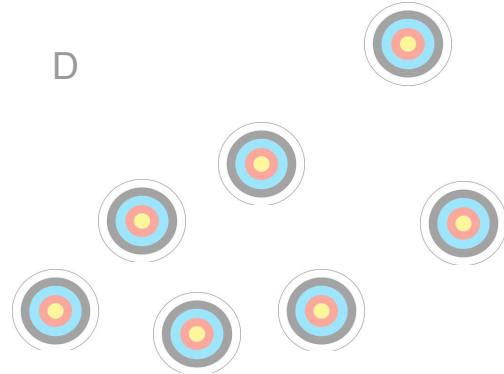
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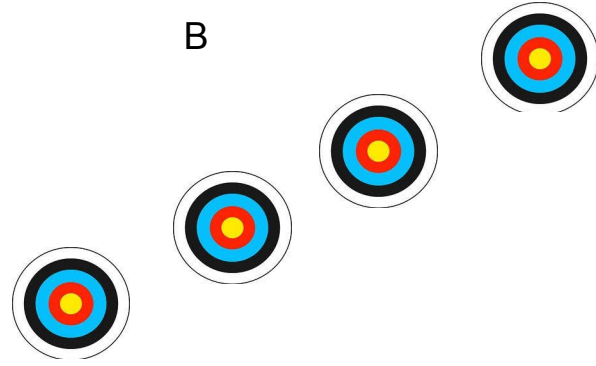
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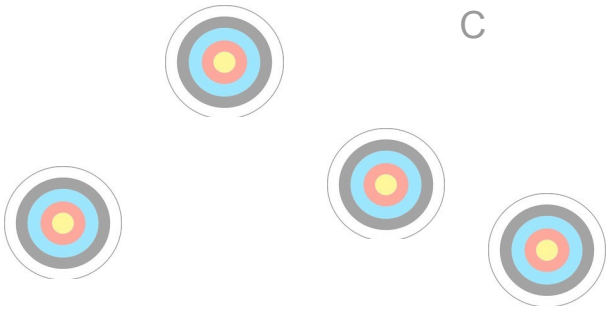
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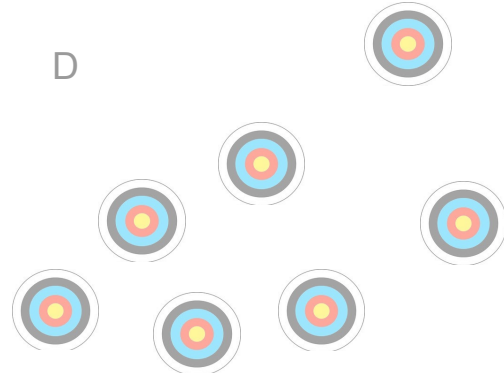
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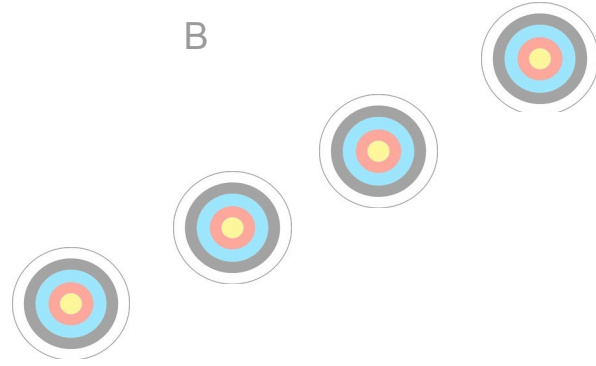
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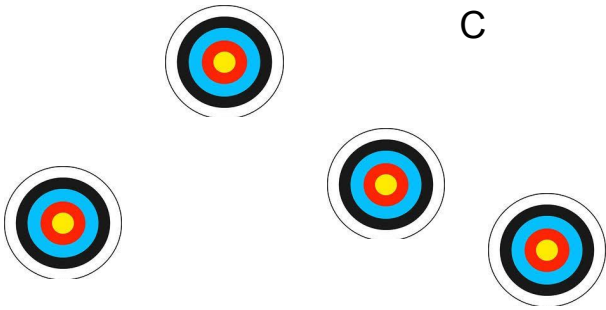
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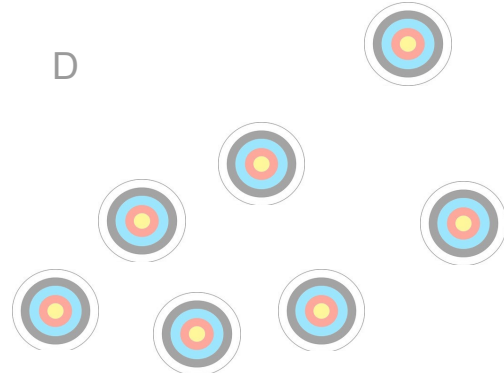
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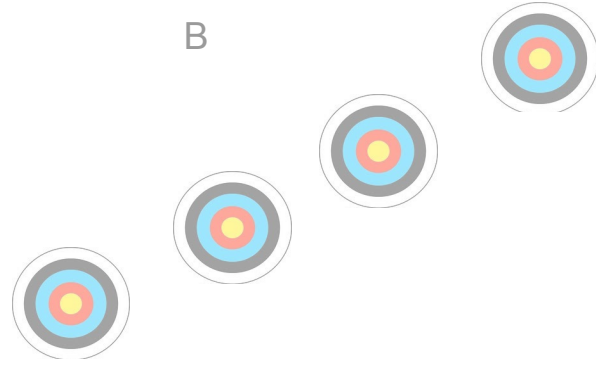
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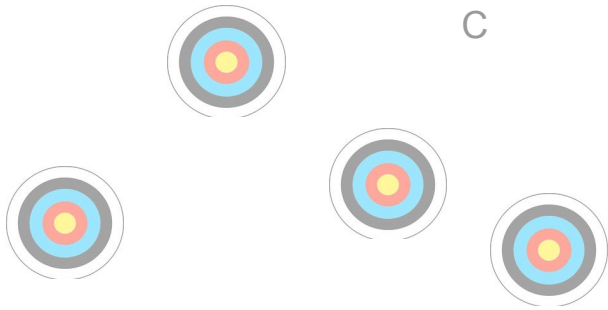
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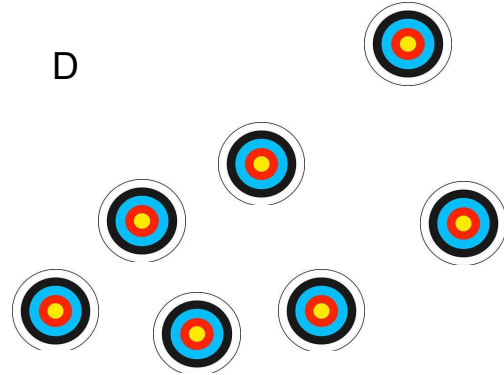
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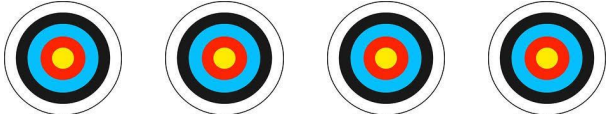
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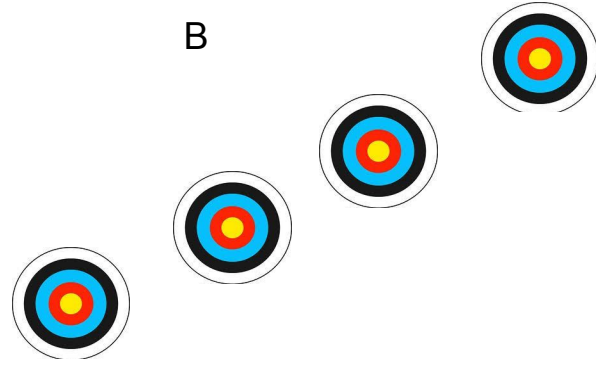
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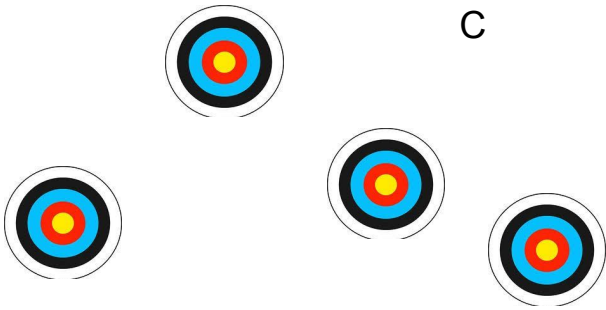
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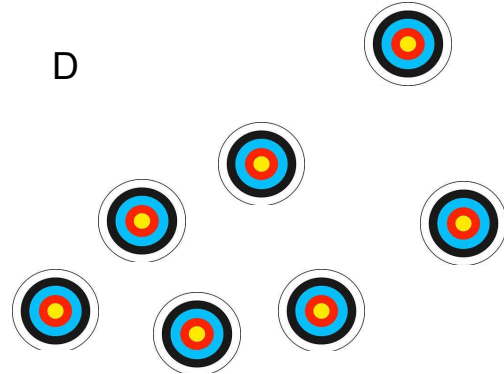
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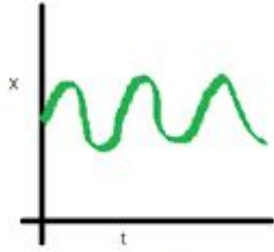
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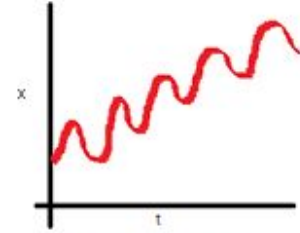
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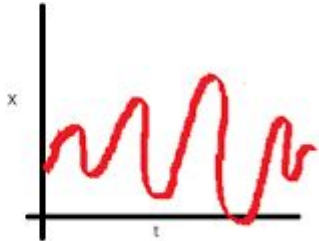
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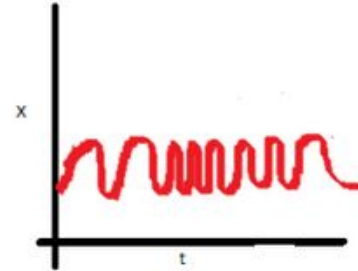
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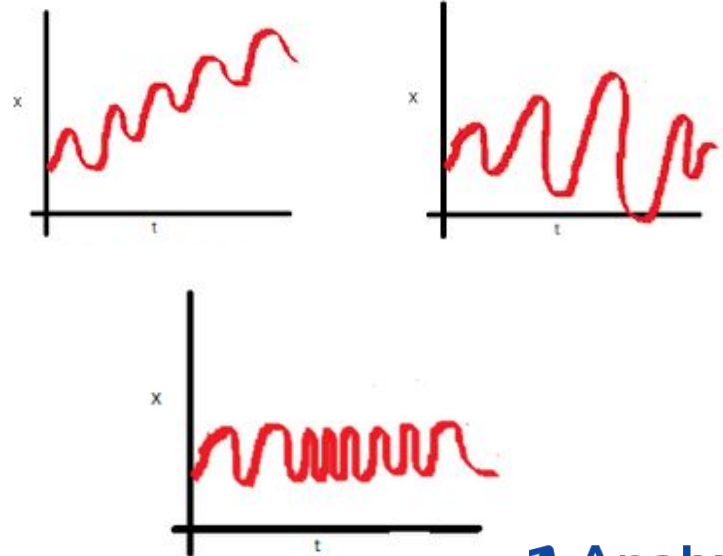


What is Stationarity?

- A stationary series is one whose statistical properties like – mean, variance, covariance do not vary with time.

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- Stationary Series will have
 - Constant mean
 - Constant variance
 - Constant covariance
- A Series with trend and seasonality is not stationary

Types of Stationarity in Time Series

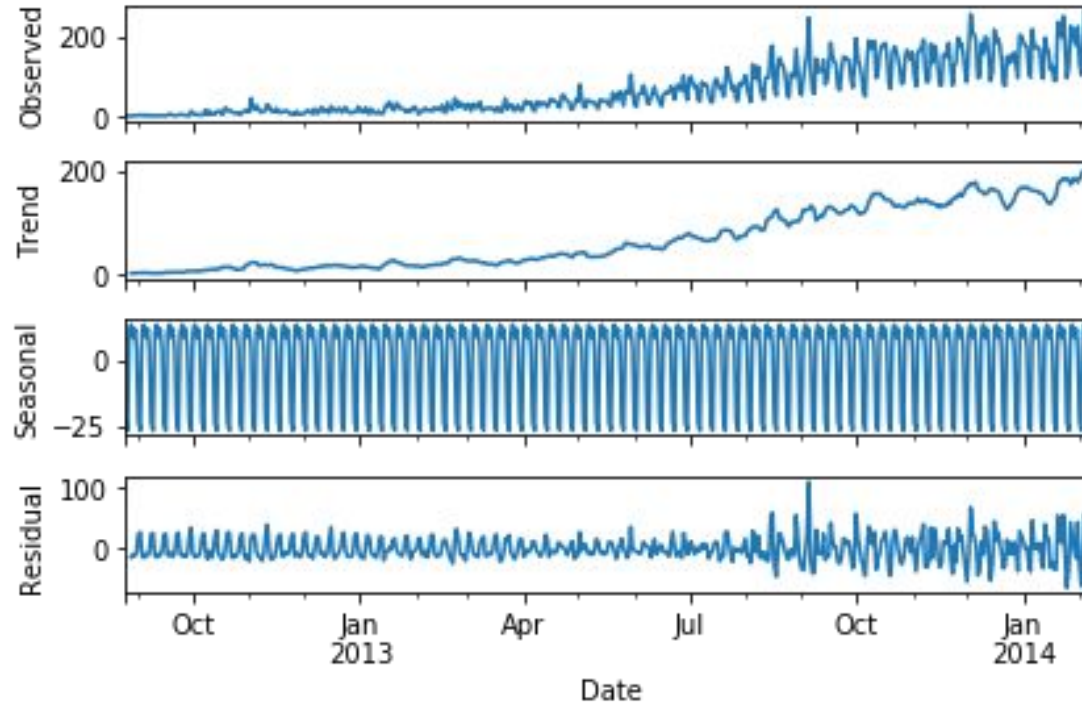
- **Strict Stationary:**
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Types of Stationarity in Time Series

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 - Satisfies the mathematical definition of a stationary process.
 - The mean, variance and covariance are not the function of time.
- **Trend Stationary:**
 - A series exhibits a trend is referred to as a trend stationary series.
 - Once the trend is removed, the resulting series will be strict stationary.

Thank You

Components of a Time Series



How to make Series Stationary?

- Remove trend and seasonal component

