

Visualizing One Numeric Variable



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Overview



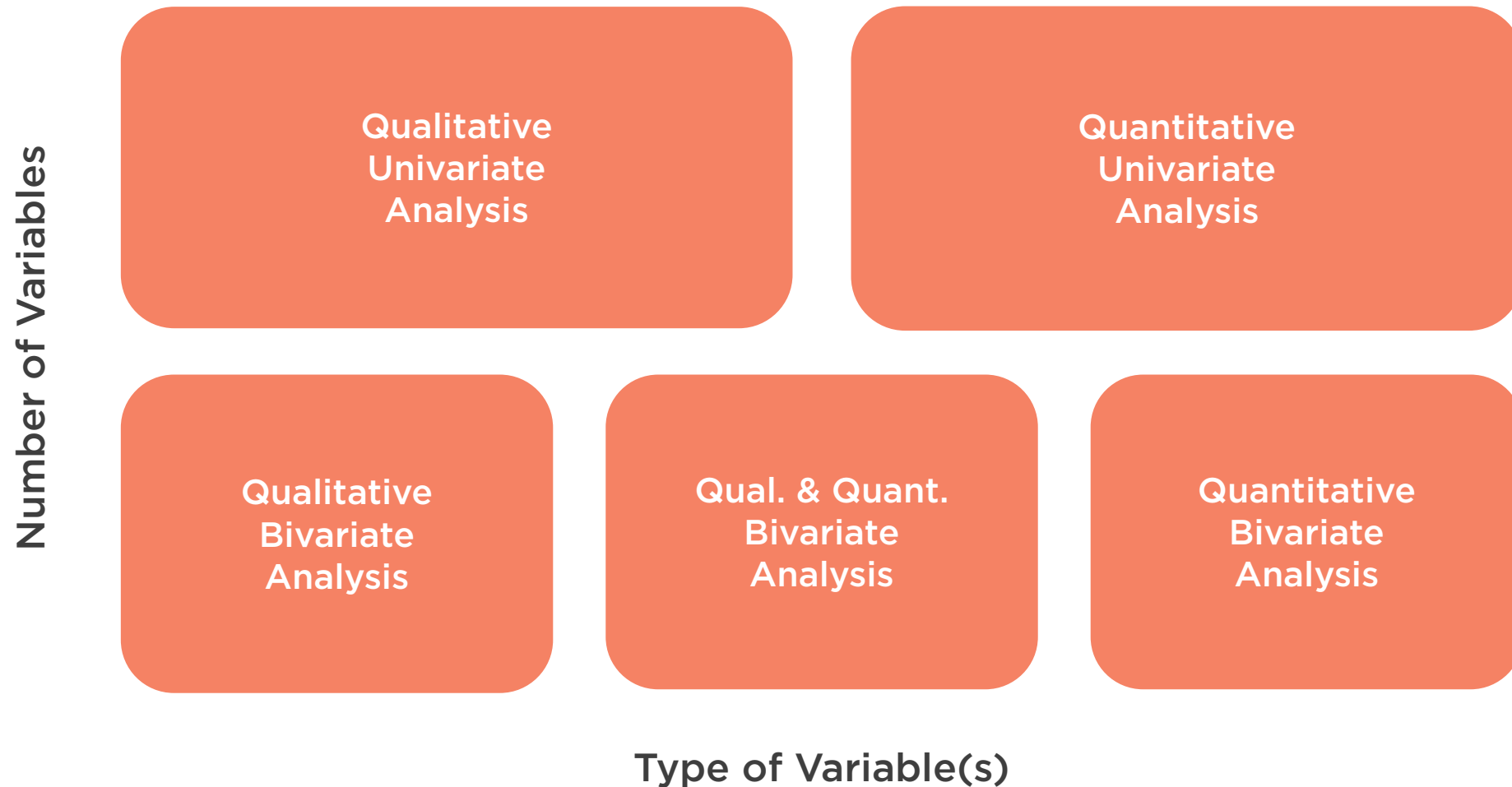
Quantitative Univariate Analysis

Demo (Base)

Demo (Lattice)

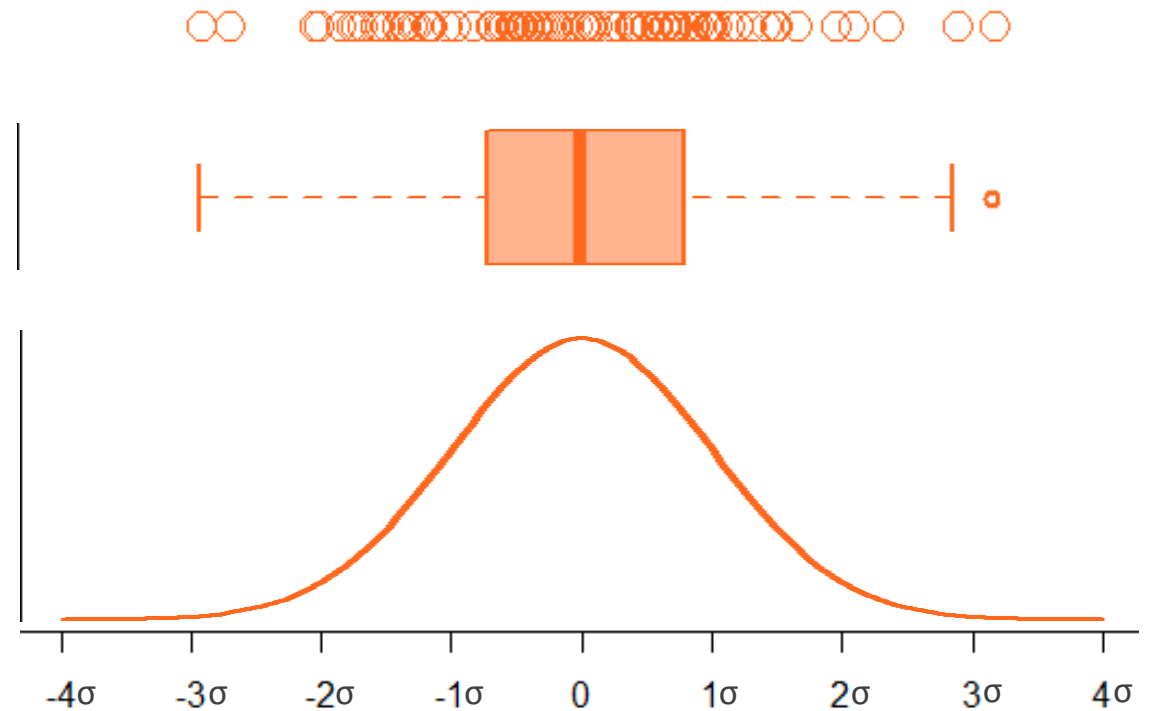
Demo (ggplot2)

Types of Data Analysis



Quantitative Univariate Analysis

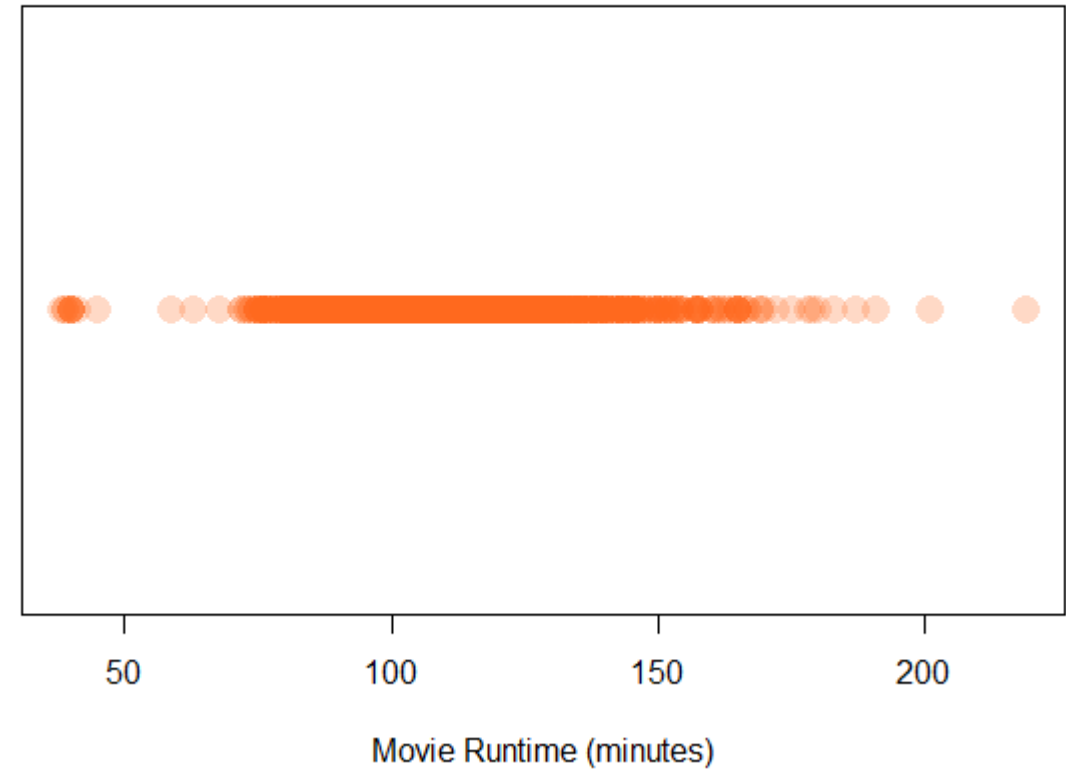
Location
Spread
Shape



Dot Plot

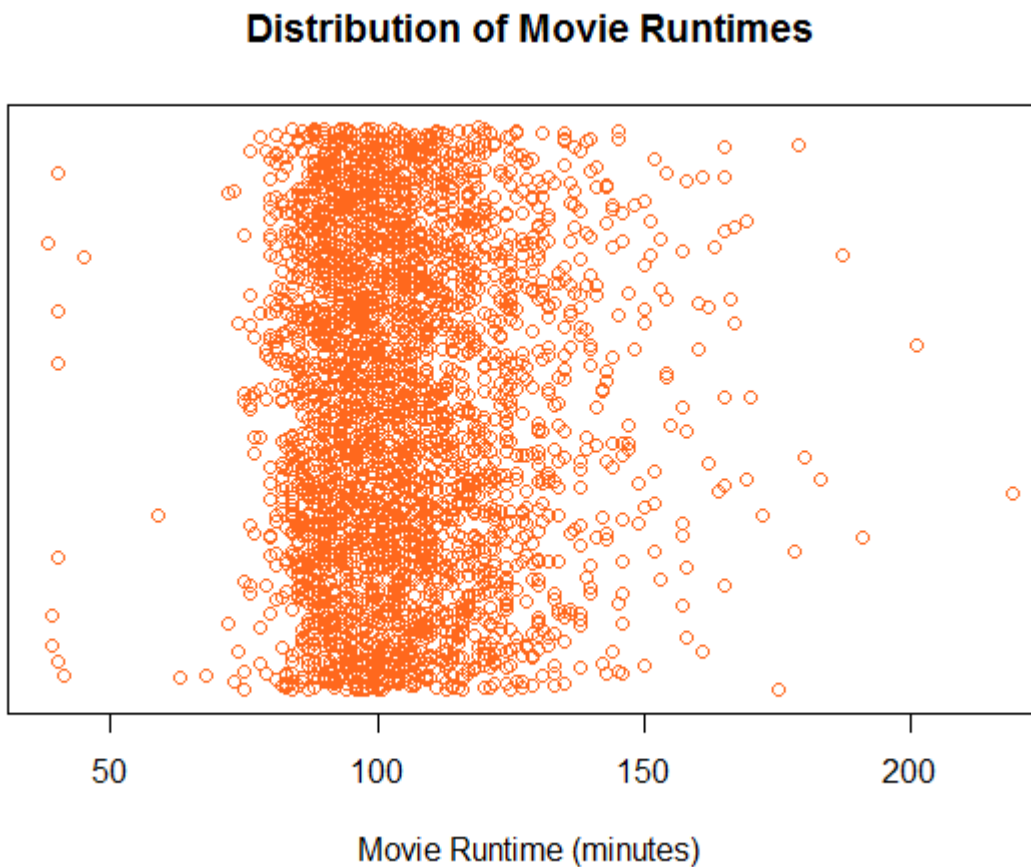
Location
Simple
Small size

Distribution of Movie Runtimes



Jitter Plot

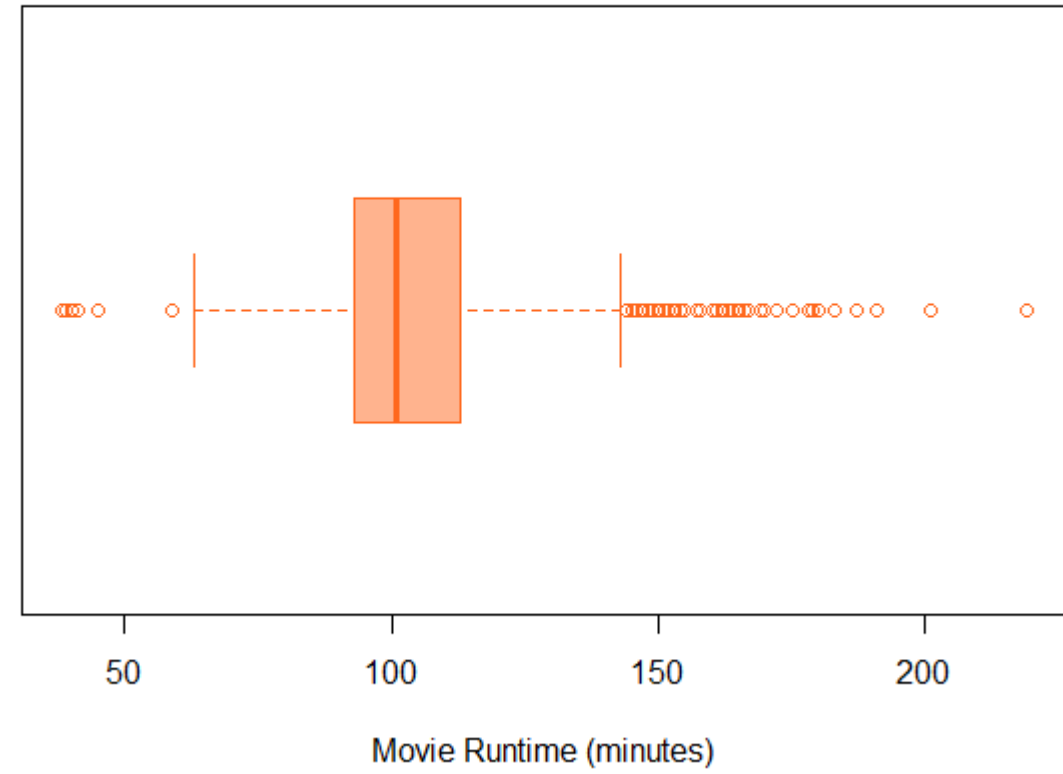
Noise
Larger size
Discrete values



Box Plot

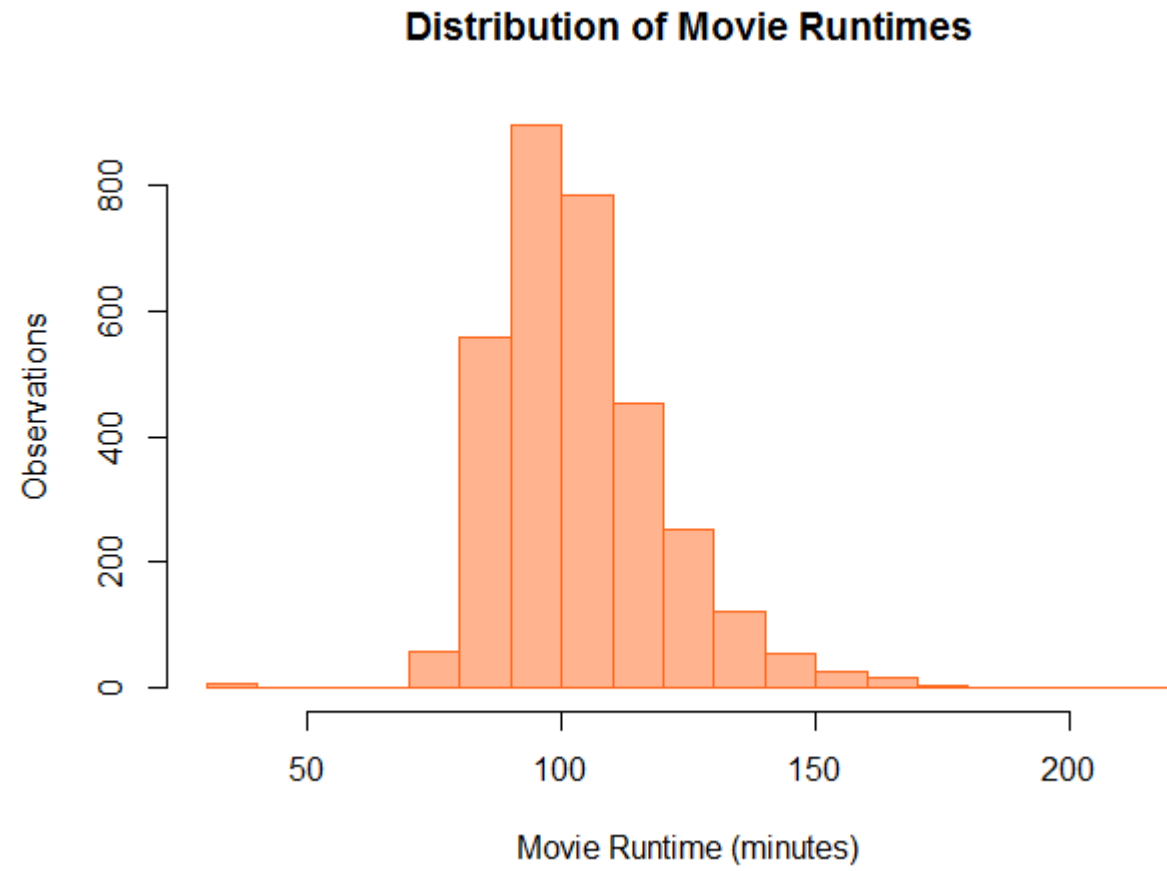
Location
Spread
Outliers

Distribution of Movie Runtimes



Histogram

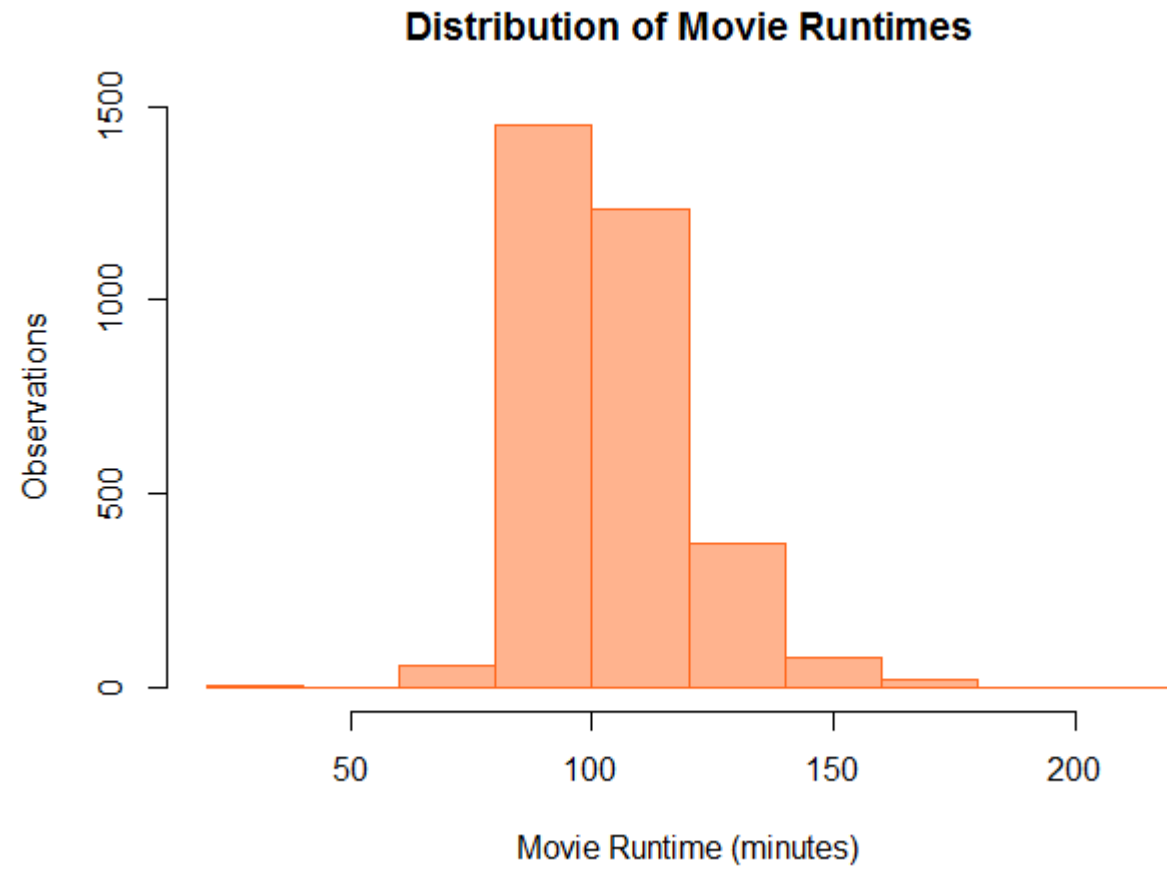
Bins
Shape



Histogram

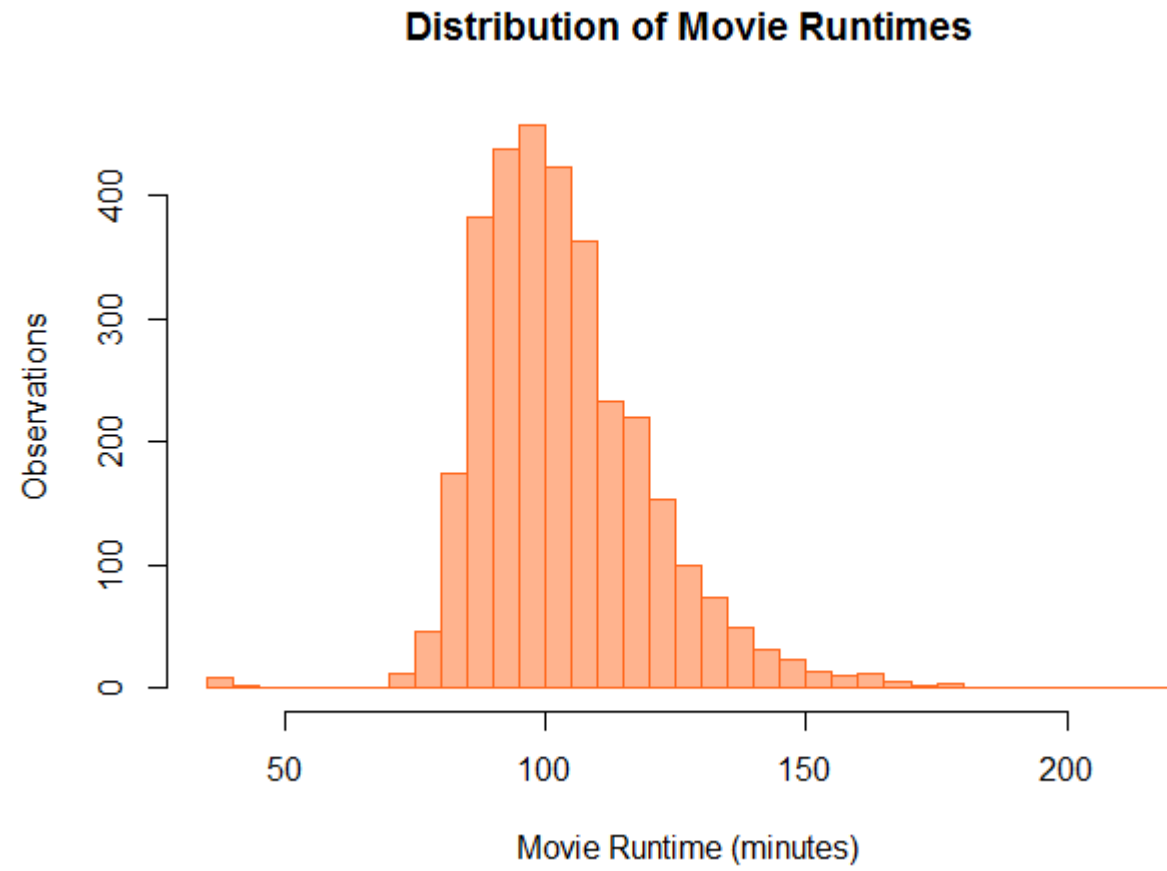
Bins

Shape



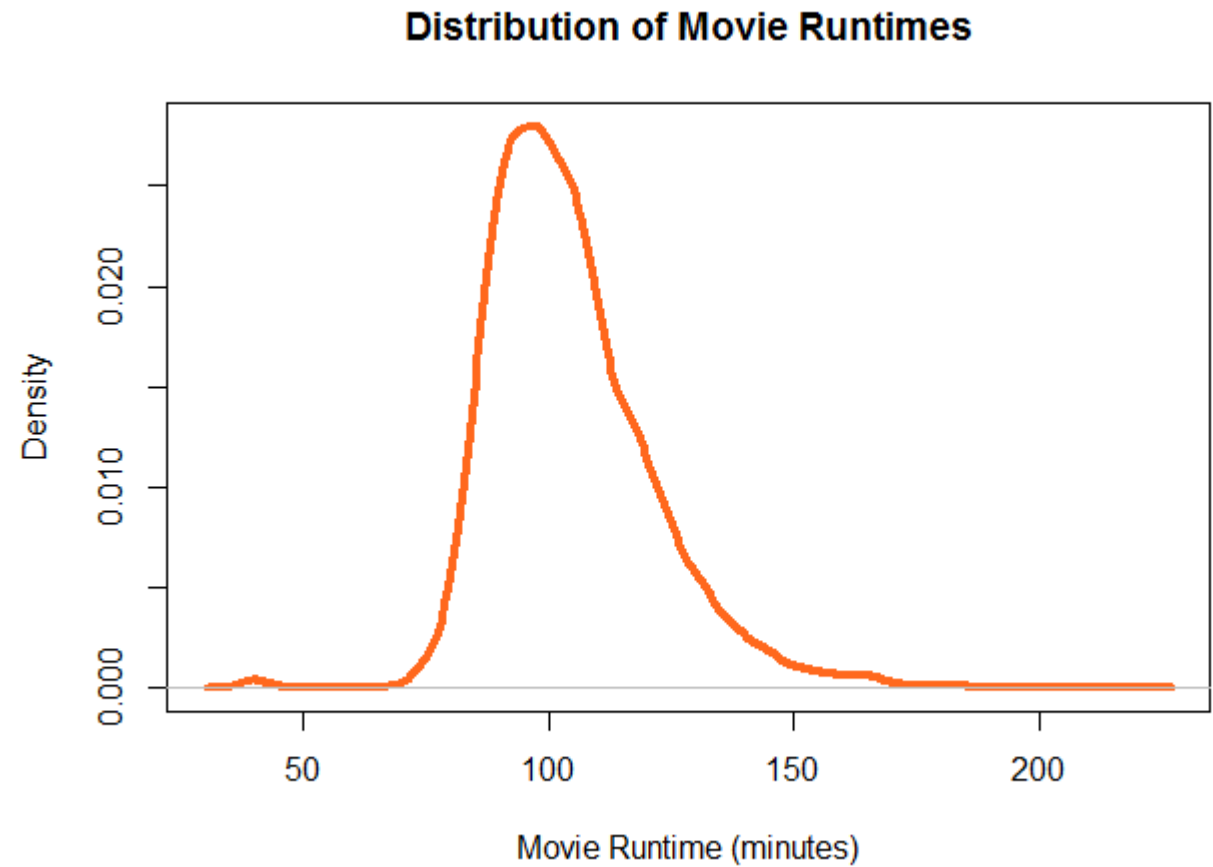
Histogram

Bins
Shape



Density Plot

Shape
Smooth
Density





1. What is the average movie runtime?
2. Are there any outliers?
3. How spread out are the movie runtimes?
4. What is the shape of the runtime distribution?



Create a Dot Plot



Create a Dot Plot with Transparency



Create a Dot Plot with Jitter



Create a Box Plot



Create a Histogram



Create a Coarse-grained Histogram



Create a Fine-grained Histogram



Create a Density Plot



Create Small Multiples



Create a Dot Plot



Create a Dot Plot with Jitter



Create a Box Plot



Create a Histogram



Create a Density Plot



Create Small Multiples



Create Dot Plot



Create a Violin-style Dot Plot



Create Box Plot



Create a Histogram



Create a Density Plot



Create Small Multiples





Summary



Quantitative Univariate Analysis

Demo (Base)

Demo (Lattice)

Demo (ggplot2)