

## Conclusion

### **Summary**

Summary of Statistics Onramp

## Import and Prepare Data

Function	Description
<a href="#">readtable</a>	Create a table from a file.
<a href="#">categorical</a>	Create a categorical variable.

## Visualizing Data

Function	Example	Description
<a href="#">scatter</a>	<code>scatter(x,y)</code>	Create a scatter plot with circular markers at the locations specified by the vectors x and y.
<a href="#">gscatter</a>	<code>gscatter(x,y,g)</code>	Create a scatter plot of x and y, grouped by g
<a href="#">histogram</a>	<code>histogram(x,"BinWidth",0.5)</code>	Create a histogram of the data in x using 0.5 as the bin width.
<a href="#">boxchart</a>	<code>boxchart(xgroupdata,ydata)</code>	Create a box plot of y data according to x groups.
<a href="#">scatterhistogram</a>	<code>scatterhistogram(x,y)</code>	Create a scatter plot of x and y with histograms.

## Descriptive Statistics

### Measures of Center

Function	Description
<a href="#">mean</a>	Average of the data.
<a href="#">median</a>	Middle point of the data.

### Measures of Spread

Function	Description
<a href="#">std</a>	Standard deviation of the data.
<a href="#">range</a>	Range of the data, difference between maximum and minimum value.
<a href="#">iqr</a>	Interquartile range, or IQR, range of the middle 50% of the data.

### Measures of Shape

Function	Description
<a href="#">skewness</a>	Skewness of the data.
<a href="#">kurtosis</a>	Tailedness of the data.

## Normal Distributions

Function	Description
<a href="#">randn</a>	Generate random numbers from the standard normal distribution.
<a href="#">normrnd</a>	Generate random numbers from a normal distribution with known mean and standard

	deviation.
<a href="#">normpdf</a>	Returns the probability density function from the normal distribution evaluated at x.
<a href="#">normcdf</a>	Returns the cumulative density function (cdf) from the normal distribution evaluated at x.
<a href="#">fitdist</a>	Fit a distribution to data.
<a href="#">ggplot</a>	Displays a quantile-quantile plot.

## Hypothesis Testing

Function	Description
<a href="#">ttest2</a>	Test for the difference in mean between two populations.
<a href="#">jbtest</a>	Jarque-Bera test for normality.
<a href="#">lillietest</a>	Lilliefors test for normality.

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