Chapter 3

# Applying the Concepts: StatCrunch Instructions

## Interpret a Histogram

1. Open the countries.csv dataset in StatCrunch
2. Graph → Histogram
3. Select Columns → life\_expectancy
4. Click Compute!

## Describe a Density Plot

StatCrunch functionality projected for 2025.

## Work with a Box Plot

1. Open the countries.csv data in StatCrunch.
2. Graph → Boxplot.
3. Select columns → mean\_years\_of\_schooling
4. Click “Compute!”

## Interpret a Violin Plot

1. Open the countries.csv data in StatCrunch
2. Graph→Violin Plot
3. Select columns → gni\_per\_capita
4. Click “Compute!”

## Ponder a Word Cloud

StatCrunch functionality projected for 2025.

## Contemplate a Box Plot with a Categorical Variable

1. Open the countries.csv data in StatCrunch.
2. Graph→Boxplot
3. Select Columns → whr\_score
4. In the “Where:” box enter:

*continent = “Africa” or continent = “Asia” or continent = “Europe” or continent = “Oceania”*

1. Group by → continent.
2. Click Compute!

## Interpret a Violin Plot with a Categorical Variable

1. Open the countries.csv data in StatCrunch
2. Graph→Violin Plot
3. Select Columns → life\_expectancy
4. In the “Where:” box, add the following expression:

*income\_group = “Lower middle income” or income\_group = “Upper middle income”*

1. Group by → income\_group
2. Click Compute!

## Interpret a Scatter Plot

1. Open the countries.csv dataset in StatCrunch
2. Graph → Scatter Plot
3. X variable → gni\_per\_capita
4. Y variable → life\_expectancy
5. Under Overlay polynomial order, select 1
6. Click Compute!

## Explore a Line Chart

1. Open the lex\_long.csv data in StatCrunch.
2. Graph → Index/Time Plot
3. Select columns → life\_expectancy
4. In the “Where:” box, enter the following expression:

*country="USA" and year>=1880 and year<=2020*

1. X axis format → Custom
2. Labels in → year
3. Click Compute!

## Describe a Bubble Chart

1. Open the countries.csv dataset in StatCrunch
2. Graph → Bubble Plot
3. X variable → mean\_years\_of\_schooling
4. Y variable → whr\_score
5. Under size variable → population
6. Click Compute!

## Interpret a Heatmap

StatCrunch functionality projected for 2025.

## Interpret a Geographic Map

StatCrunch functionality projected for 2025.