

# Interactive plotting with Shiny app and plotly packages

## 0.1 Requirements for this lab

In this lab, you are required to use the skills learned from Module 9 to create a R Markdown which includes the interactive plotting using the packages “shiny” app and “plotly”.

- Please use the data provided to conduct a **Interactive plotting with Shiny app and plotly** based on the step mentioned below.

Steps:

1. Install and load required packages.
2. Load and inspect the dataset.
3. Create .R file, not a RMD file. Shiny applications not supported in static R Markdown documents.
4. Create a shiny app in this R file.
5. Please create two interactive plot\_ly objects. One is a plot\_ly() object with selection of “State” and the second plot\_ly() with selection of “Year”. You can check the example below, but please complete the codes required.

```
ui <- fluidPage(
  selectInput(inputId = "inputstates"),
  selectInput(inputId = "inputyears"),
  plotlyOutput(outputId = "outstates"),
  plotlyOutput(outputId = "outyears")
)
```

```
server <- function(input, output, ...) {
  output$outstates <- renderPlotly({plot_ly()})
```

```
  output$outyears <- renderPlotly({plot_ly()})
}
```

6. For the plot\_ly() object with selection of “State”, please create a line plot with years.
7. For the plot\_ly() object with selection of “Year”, please create a histogram over all states.

## 0.2 Create plots

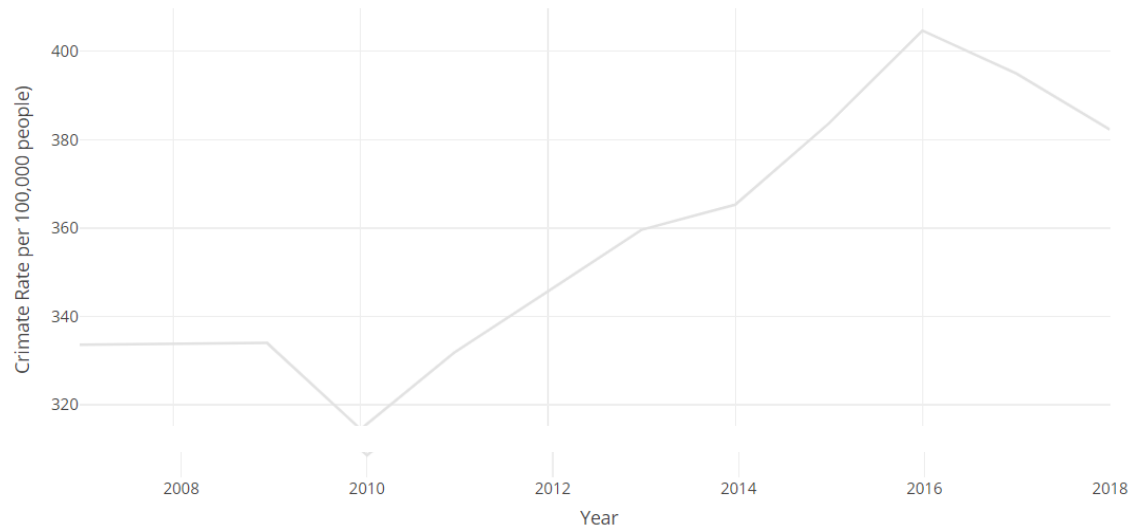
Select a state

Indiana

Select a year

2014

Crime Rate Changes Over Year



Crime Rate Histogram over all states

