

Shiny App: Random variable generator and visualization

```
library(shiny)
```

```
ui <- fluidPage(
```

```
  sliderInput(inputId = "num",  
             label = "Choose a number by sliding",  
             value = 50, min = 0, max = 1000),  
  actionButton(inputId = "norm", label = "Normal"),  
  actionButton(inputId = "unif", label = "Uniform"),  
  actionButton(inputId = "exp", label = "Exponential"),  
  actionButton(inputId = " pois", label = " Poisson"),  
  plotOutput("hist"),  
  plotOutput("boxplot")  
)
```

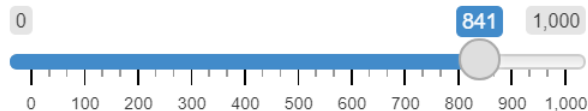
```
# Eralda Gjika : https://al.linkedin.com/in/eralda-dhamo-gjika-71879128
```

```
server <- function(input, output) {
```

```
  rv <- reactiveValues(data = rep(0,1000))  
  observeEvent(input$norm, { rv$data <- rnorm(1000) })  
  observeEvent(input$unif, { rv$data <- runif(1000) })  
  observeEvent(input$exp, { rv$data <- rexp(1000) })  
  observeEvent(input$pois, { rv$data <- rpois(1000) })  
  output$hist <- renderPlot({  
    hist(rv$data,col="red",main="Histogram of data")  
  })  
  output$boxplot <- renderPlot({  
    boxplot(rv$data, col="darkblue",main="Boxplot of  
data")  
  })  
}
```

```
shinyApp(ui = ui, server = server)
```

Choose a number by sliding



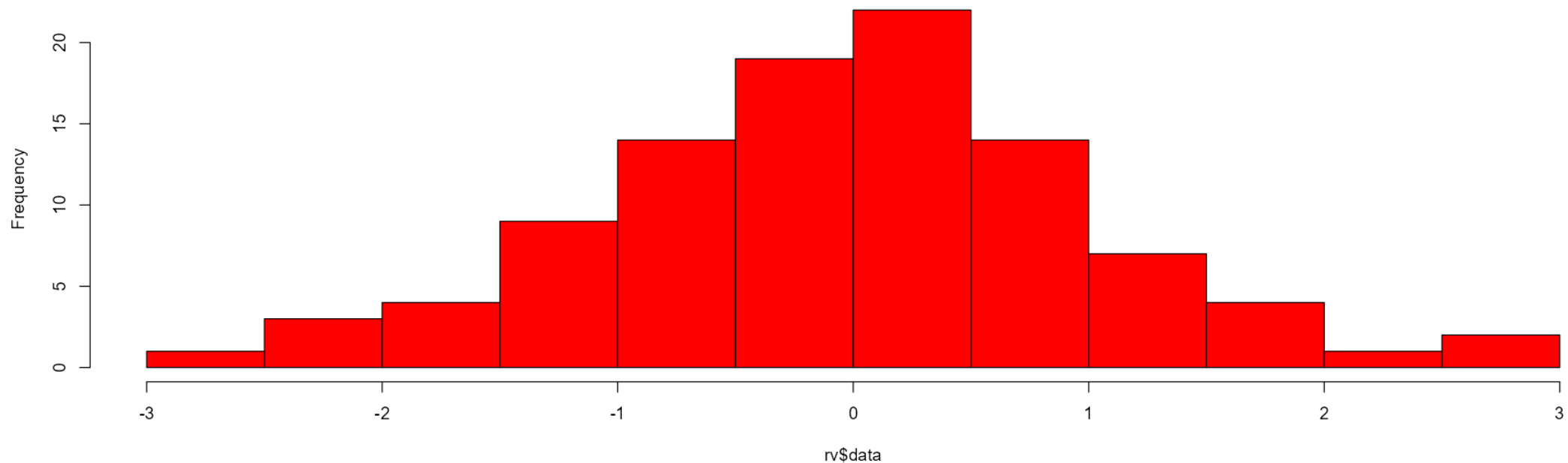
Normal

Uniform

Exponential

Poisson

Histogram of data



Boxplot of data

