Assignment 6

Ex01

```
> library(shiny); runApp('C:/Users/jsnor/OneDrive/Desktop/SCHOOL/UT-
Dallas/Courses/EPPS6356-DataVisualization/Assignments/Shiny/ex01.R')
Rows: 61 Columns: 6
── Column specification ─────────────────────────────────────────────────
Delimiter: ","
chr (1): Date of survey
dbl (5): Hongkonger, Hongkonger in China, Chinese in Hong Kong, Chinese, Mixed Identity

ℹ Use `spec()` to retrieve the full column specification for this data.
ℹ Specify the column types or set `show_col_types = FALSE` to quiet this message.

Listening on http://127.0.0.1:6964
```
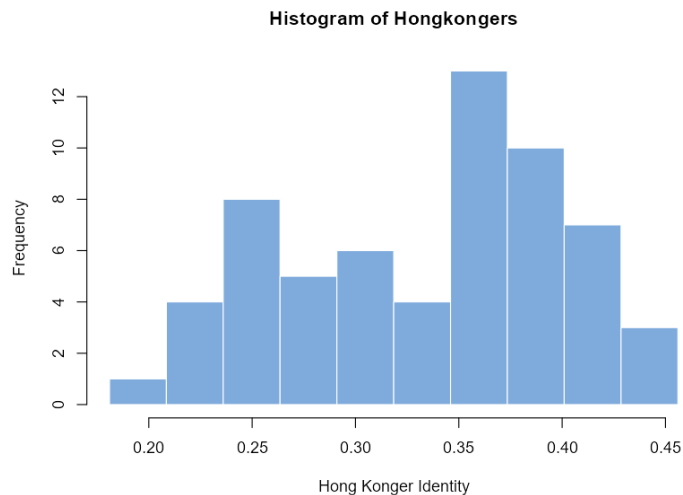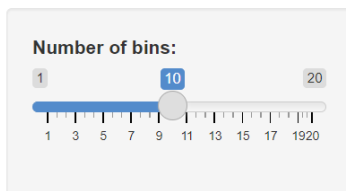

i. Can you change the personal font?

```
# Load necessary libraries
library(foreign)
library(shiny)
library(readr)

# Load data
hkid <-
read_csv("https://raw.githubusercontent.com/datageneration/datavisualization/master/data/
hkid.csv")

# Define UI for app that draws a histogram ----
ui <- fluidPage(

  # Add custom CSS to change font
  tags$style(HTML("
    body {
      font-family: Georgia, serif;
    }
  ")),
```

```r
  # App title ----
  titlePanel("Hong Kong Identity"),

  # Sidebar layout with input and output definitions ----
  sidebarLayout(

    # Sidebar panel for inputs ----
    sidebarPanel(

      # Input: Slider for the number of bins ----
      sliderInput(inputId = "bins",
                  label = "Number of bins:",
                  min = 1,
                  max = 20,
                  value = 10)

    ),

    # Main panel for displaying outputs ----
    mainPanel(

      # Output: Histogram ----
      plotOutput(outputId = "distPlot")

    )
  )
)

# Define server logic required to draw a histogram ----
server <- function(input, output) {

  # Histogram of the Hong Kong Identity Data ----
  output$distPlot <- renderPlot({

    x    <- hkid$Hongkonger
    bins <- seq(min(x), max(x), length.out = input$bins + 1)

    hist(x, breaks = bins, col = "#75AADB", border = "white",
         xlab = "Hong Konger Identity",
         main = "Histogram of Hongkongers")

  })

}

# Create Shiny app ----
shinyApp(ui = ui, server = server)
```
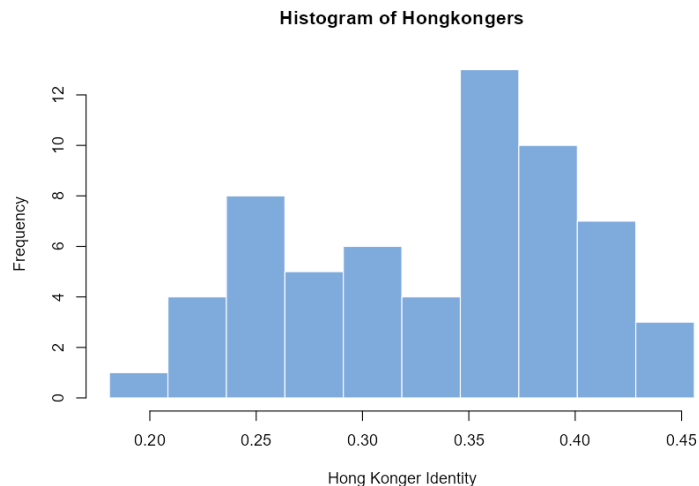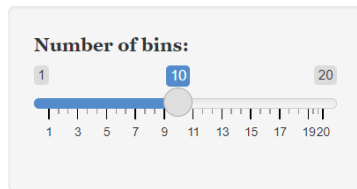
Hong Kong Identity

Number of bins:

1 [10] 20

1 3 5 7 9 11 13 15 17 1920

Histogram of Hongkongers

Frequency vs Hong Konger Identity

Ex02

```
> runApp('C:/Users/jsnor/OneDrive/Desktop/SCHOOL/UT-Dallas/Courses/EPPS6356-
DataVisualization/Assignments/Shiny/ex02.R')
Error in setwd("yourdirectory") : cannot change working directory
> runApp('C:/Users/jsnor/OneDrive/Desktop/SCHOOL/UT-Dallas/Courses/EPPS6356-
DataVisualization/Assignments/Shiny/ex02.R')
Error in setwd("yourdirectory") : cannot change working directory
> runApp('C:/Users/jsnor/OneDrive/Desktop/SCHOOL/UT-Dallas/Courses/EPPS6356-
DataVisualization/Assignments/Shiny/ex02.R')
Rows: 61 Columns: 6
── Column specification ──────────────────────────────────────────────────────
Delimiter: ","
chr (1): Date of survey
dbl (5): Hongkonger, Hongkonger in China, Chinese in Hong Kong, Chinese, Mixed Identity

ℹ Use `spec()` to retrieve the full column specification for this data.
ℹ Specify the column types or set `show_col_types = FALSE` to quiet this message.
Rows: 50 Columns: 4
── Column specification ──────────────────────────────────────────────────────
Delimiter: ","
chr (2): country, CO2percent
dbl (1): CO2pc
num (1): CO2 _kt

ℹ Use `spec()` to retrieve the full column specification for this data.
ℹ Specify the column types or set `show_col_types = FALSE` to quiet this message.
Rows: 140 Columns: 11
── Column specification ──────────────────────────────────────────────────────
Delimiter: ","
chr (3): Region, InequalityofOutcomes, GDPPC
dbl (7): AverageLifeExpectancy, AverageWellbeing, HappyLifeYears, Footprint, Inequality-
adjustedLifeExp...
num (1): Population

ℹ Use `spec()` to retrieve the full column specification for this data.
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```

Reactivity

Caption:

| Data Summary |

Choose a dataset:

| Hong Kong Identity ▼ |

Number of observations to view:

| 10 |

Data Summary

```
 Date of survey       Hongkonger     Hongkonger in China Chinese in Hong Kong     Chinese
 Length:61        Min.   :0.1810    Min.   :0.1800      Min.   :0.103        Min.   :0.1380
 Class :character 1st Qu.:0.2800    1st Qu.:0.2170      1st Qu.:0.133        1st Qu.:0.1810
 Mode  :character Median :0.3550    Median :0.2390      Median :0.150        Median :0.2300
                  Mean   :0.3348    Mean   :0.2439      Mean   :0.152        Mean   :0.2415
                  3rd Qu.:0.3870    3rd Qu.:0.2680      3rd Qu.:0.169        3rd Qu.:0.2930
                  Max.   :0.4560    Max.   :0.3310      Max.   :0.203        Max.   :0.3860
 Mixed Identity
 Min.   :0.3090
 1st Qu.:0.3630
 Median :0.3930
 Mean   :0.3959
 3rd Qu.:0.4270
 Max.   :0.4920
```

Date of survey	Hongkonger	Hongkonger in China	Chinese in Hong Kong	Chinese	Mixed Identity
26-27/8/1997	0.35	0.25	0.20	0.19	0.45
23-24/9/1997	0.36	0.24	0.20	0.17	0.44
28-29/10/1997	0.37	0.23	0.20	0.17	0.43
8-9/12/1997	0.36	0.23	0.19	0.18	0.42
3-4/6/1998	0.34	0.19	0.19	0.25	0.37
22-24/6/1998	0.30	0.18	0.16	0.32	0.34
14/8/1998	0.30	0.25	0.20	0.22	0.45
29/9/1998	0.39	0.23	0.15	0.21	0.38
21/12/1998	0.41	0.22	0.15	0.17	0.37
8-9/2/1999	0.41	0.21	0.15	0.18	0.36

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```

Reactivity

Caption:

Data Summary

Choose a dataset:

Hong Kong Identity ▾

Number of observations to view:

10

Data Summary

```
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                 3rd Qu.:0.3870  3rd Qu.:0.2680      3rd Qu.:0.169       3rd Qu.:0.2930
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1st Qu.:0.3630
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Date of survey	Hongkonger	Hongkonger in China	Chinese in Hong Kong	Chinese	Mixed Identity
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8–9/12/1997	0.36	0.23	0.19	0.18	0.42
3–4/6/1998	0.34	0.19	0.19	0.25	0.37
22–24/6/1998	0.30	0.18	0.16	0.32	0.34
14/8/1998	0.30	0.25	0.20	0.22	0.45
29/9/1998	0.39	0.23	0.15	0.21	0.38
21/12/1998	0.41	0.22	0.15	0.17	0.37
8–9/2/1999	0.41	0.21	0.15	0.18	0.36

Ex03
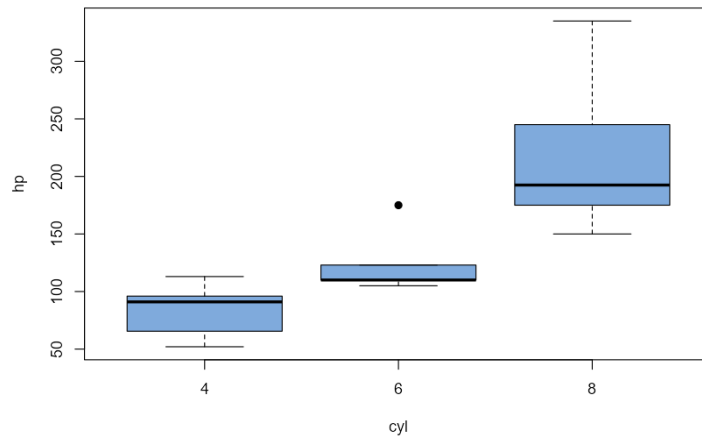
> runApp('C:/Users/jsnor/OneDrive/Desktop/SCHOOL/UT-Dallas/Courses/EPPS6356-DataVisualization/Assignments/Shiny/ex03.R')

Listening on http://127.0.0.1:6964

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