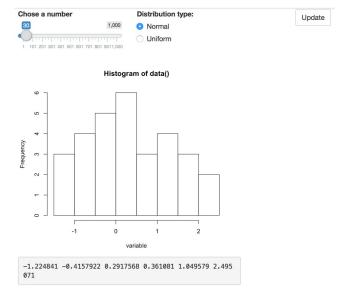**Homework 4**

1. Generate all the widgets given in the link below. While coding, one can arrange them in grid or display them one below another. **(20 points)**

   https://shiny.rstudio.com/gallery/widget-gallery.html

2. Write codes to demonstrate the following layouts. **(40 points)**

   a. Sidebar layout

   b. Split layout

   c. Vertical layout

   d. Tabsets

3. Create the interface as shown in the figure below. It should have the following widgets

   a. Slider bar

   b. Radio Button

   c. Action Button

   d. Output Plot

   e. Output Text

   It should behave as follows. The user can choose number of data points using slider bar. The user can then choose the type of random distribution. Upon clicking the action button, the application should consider the number of data points from the slider and generate that many Normal or Uniform distributed numbers as chosen by the user. Also, the text below the plot should summarize the data generated. **(40 points)**