**QUESTION:**

Write an R code to create a dashboard using the ‘Shiny’ module.

**CODE:**

* Server:

shinyServer(

  function(input, output, session)

  {

    output$myPlot <- renderPlot({

      distributionType <- input$distribution

      size <- input$sampleSize

      if (distributionType == "Normal")

      {

        randomeVector <- rnorm(size, mean = as.numeric(input$mean), sd = as.numeric(input$standardDeviation))

      }

      else

      {

        randomVector <- rexp(size, rate = 1 / as.numeric(input$lambda))

      }

      hist(randomVector, col = 'purple')

    })

  }

)

* User Interface:

library(shiny)

library(shinydashboard)

#Creating an application name called 'shinyServer'

shinyServer(

  pageWithSidebar(

    headerPanel("20BDS0374"),

    sidebarPanel(

      selectInput("distribution", "Please select the distribution type"),

      choices = c('Normal', 'Exponential')

    ),

    sliderInput("sampleSize", "Please select a sample size", min = 100, max = 5000, step = 100),

    conditionalPanel(condition = "input.distribution == 'Normal'",

                     textInput("mean", "Please enter a mean value: ", 10),

                     textInput("standardDeviation", "please enter the standard deviation", 3)

    ),

    conditionalPanel(condition = "input.distribution == 'Exponential'",

                     textInput("lambda", "Please enter the exponential value")),

    mainPanel(plotOutput('myPlot'))

  )

)

**OUTPUT:**

