```
install.packages("shiny")
install.packages("tidyverse")
install.packages("leaflet")
library(shiny)
library(tidyverse)
library(leaflet)
# read in data
adult <- read_csv("adult.csv")</pre>
#convert column names to lower case for convenience
names(adult) <- tolower(names(adult))</pre>
#define server logic
shinyServer(function(input, output) {})
# Application Layout
shinyUI(
  fluidPage(
    br(),
    # TASK 1: Application title
    titlePanel("Trends in Demographics and Income"),
    p("Explore the difference between people who earn less than 50K and more than 50K. You can
filter the data by country, then explore various demogrphic information."),
    # TASK 2: Add first fluidRow to select input for country
    fluidRow(
      column(12,
             wellPanel(selectInput(inputId = "NATIVE_COUNTRY", label = "Country", choices =
c("United-States", "Canada", "Mexico", "Germany", "Philippines"), selected = "United-states"))
# add select input
      )
    ),
    # TASK 3: Add second fluidRow to control how to plot the continuous variables
    fluidRow(
      column(3,
             wellPanel(
               p("Select a continuous variable and graph type (histogram or boxplot) to view on
the right."),
               radioButtons(inputId = "continuous variable", label = "Continuous", choices =
c("AGE", "HOURS PER WEEK"), selected = "HOURS PER WEEK"), # add radio buttons for continuous
variables
               radioButtons(inputId = "graph_type", label = "Graph", choices = c("histogram",
"boxplot"), selected = "histogram"
                                     # add radio buttons for chart type
      column(9, plotOutput("p1")) # add plot output
    ),
    # TASK 4: Add third fluidRow to control how to plot the categorical variables
    fluidRow(
      column(3,
             wellPanel(
               p("Select a categorical variable to view bar chart on the right. Use the check
box to view a stacked bar chart to combine the income levels into one graph. "),
              radioButtons(selectInput(inputId = 'categorical variables', label =
"Categorical", choices = c("EDUCATION", "WORKCLASS", "SEX")),
                                                                  # add radio buttons for
categorical variables
                            checkboxInput(inputId = 'is stacked', value = FALSE)
                                                                                      # add
check box input for stacked bar chart option
      column(9, plotOutput("p2")) # add plot output
    )
 )
)
```