Analytics Programming Assessment

Ryan Greenup - 17805315

Contents

Preamble

Load Packages

```
## (01) Clean up the Iris Data

# Preamble
## Install Pacman
load.pac <- function() {

  if(require("pacman")){
    library(pacman)
  }else{
    install.packages("pacman")
    library(pacman)
  }

  pacman::p_load(xts, sp, gstat, ggplot2, rmarkdown, reshape2, ggmap,
                 parallel, dplyr, plotly, tidyverse, reticulate, UsingR, Rmpfr,
                 swirl, corrplot, gridExtra, mise, latex2exp, tree, rpart, knitr,
                 bookdown)

}

load.pac()
```

```
## Loading required package: pacman
```

Knitr Configuration

Make Chunks verbose

```
knitr::opts_chunk$set(echo = TRUE, eval = TRUE)
```

Set Figure Locations

```
knitr::opts_chunk$set(
  fig.path = "figure/"
)
```

Question 1

d. Submission Receipt

The submission receipt for the preliminary assessment is provided as a screenshot at figure 1 and the recipt number is:

```
    95d652b5-e2e7-4f43-b7e5-3290b9e4ef0b
```

```
include_graphics("./Receipt.png")
```

e. Set Variables

```
studentname <- "Ryan Greenup"
studentno   <- 17805315
```

f. Print Variables

i. Show the Code Without the Results

Code can be printed without the results being printed by using the `echo=FALSE` chunk option, for example the following code:

```
\```{r, results=FALSE}
print(studentname)
print(studentno)
\```
```

Will produce the corresponding output:

```
print(studentname)
print(studentno)
```

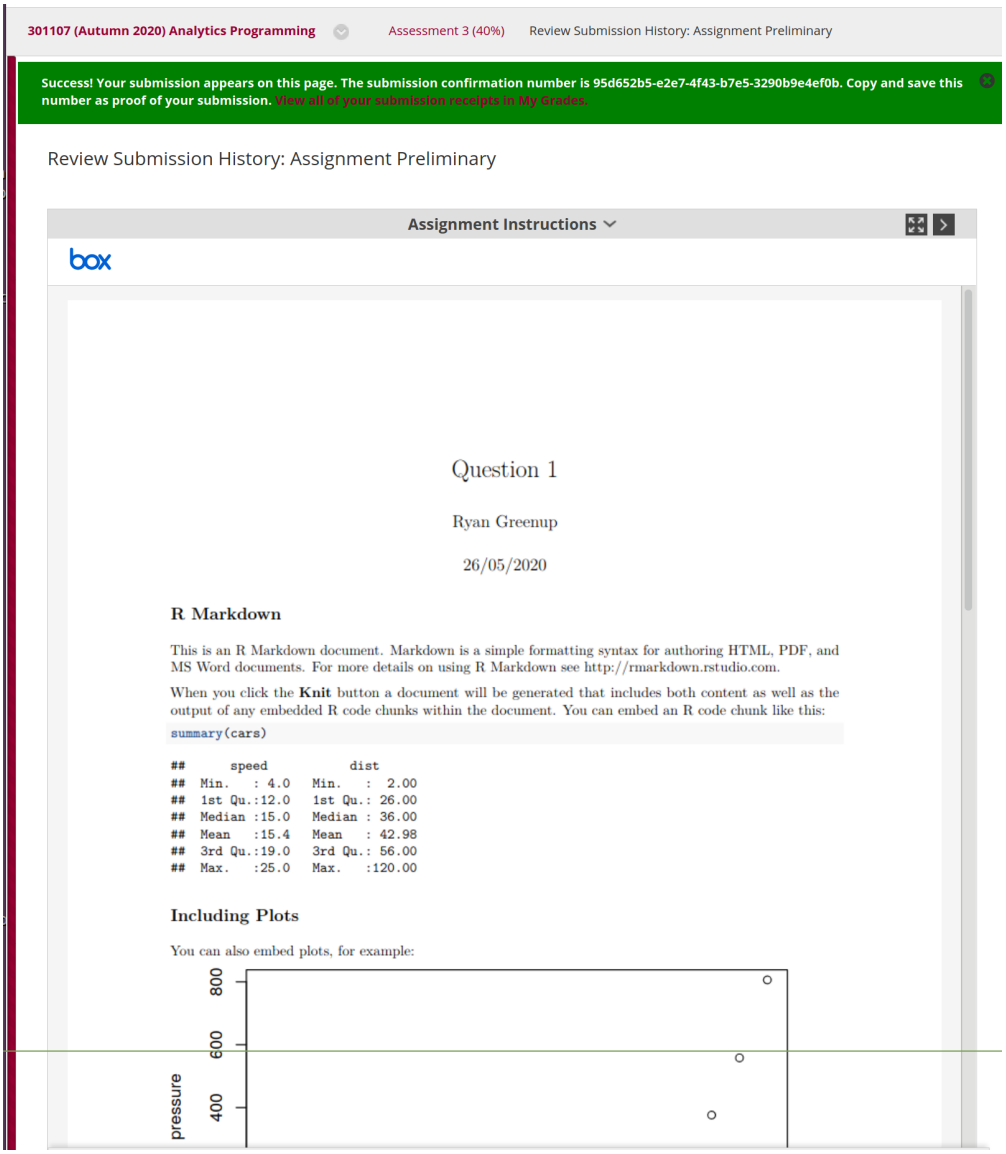
301107 (Autumn 2020) Analytics Programming
Assessment 3 (40%)
Review Submission History: Assignment Preliminary
Success! Your submission appears on this page. The submission confirmation number is 95d652b5-e2e7-4f43-b7e5-3290b9e4ef0b. Copy and save this number as proof of your submission. View all of your submission receipts in My Grades.
Review Submission History: Assignment Preliminary
Assignment Instructions
box
Question 1
Ryan Greenup
26/05/2020
R Markdown
This is an R Markdown document. Markdown is a simple formatting syntax for authoring HTML, PDF, and MS Word documents. For more details on using R Markdown see http://rmarkdown.rstudio.com.
When you click the Knit button a document will be generated that includes both content as well as the output of any embedded R code chunks within the document. You can embed an R code chunk like this:
summary(cars)
speed dist
Min. : 4.0 Min. : 2.00
1st Qu.:12.0 1st Qu.: 26.00
Median :15.0 Median : 36.00
Mean :15.4 Mean : 42.98
3rd Qu.:19.0 3rd Qu.: 56.00
Max. :25.0 Max. :120.00
Including Plots
You can also embed plots, for example:
pressure
800
600
400

Figure 1: Hi

ii. Show the Evaluated Output in the Document

```
## [1] "Ryan Greenup"
## [1] 17805315
```

ii. Show the Evaluated Output and corresponding code in the Document

```
print(studentname)
```

```
## [1] "Ryan Greenup"
```

```
print(studentno)
```

```
## [1] 17805315
```

Question 2

Question 3

Question 4