#### score

## rhadoop

### 2019 3 12

#### 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:

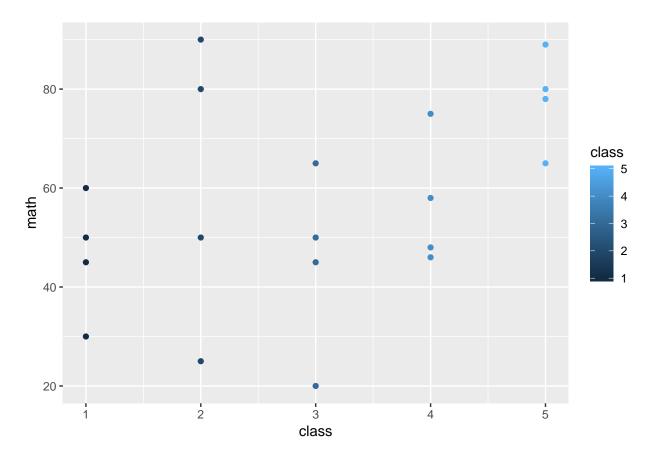
```
library(readxl)
getwd()
## [1] "/project/03_src/R"
#read.csv("../Data/csv_exam.csv") -> df_csv
read_excel("Data/excel_exam.xlsx")-> df_excel
str(df_excel)
## Classes 'tbl_df', 'tbl' and 'data.frame':
                                                  20 obs. of 5 variables:
             : num 1 2 3 4 5 6 7 8 9 10 ...
    $ class : num 1 1 1 1 2 2 2 2 3 3 ...
            : num 50 60 45 30 25 50 80 90 20 50 ...
    $ math
    $ english: num 98 97 86 98 80 89 90 78 98 98 ...
    $ science: num 50 60 78 58 65 98 45 25 15 45 ...
1.
df_excel[df_excel$class==1,]
## # A tibble: 4 x 5
##
        id class math english science
     <dbl> <dbl> <dbl>
                          <dbl>
##
                                  <dbl>
## 1
        1.
              1.
                   50.
                            98.
                                    50.
                            97.
                                    60.
## 2
        2.
              1.
                    60.
## 3
        3.
              1.
                    45.
                            86.
                                    78.
## 4
        4.
                    30.
              1.
                            98.
                                    58.
df_excel[df_excel$class==2,]
## # A tibble: 4 x 5
##
        id class math english science
##
     <dbl> <dbl> <dbl>
                          <dbl>
                                  <dbl>
## 1
        5.
              2.
                   25.
                            80.
                                    65.
                   50.
                            89.
                                    98.
## 2
        6.
              2.
## 3
        7.
              2.
                   80.
                            90.
                                    45.
## 4
              2.
                   90.
                            78.
                                    25.
        8.
```

```
df_excel[df_excel$class==3,]
## # A tibble: 4 x 5
##
        id class math english science
##
     <dbl> <dbl> <dbl>
                          <dbl>
                                   <dbl>
## 1
        9.
               3.
                    20.
                             98.
                                     15.
## 2
       10.
                             98.
                                     45.
               3.
                    50.
## 3
       11.
               3.
                    65.
                             65.
                                     65.
       12.
## 4
               3.
                    45.
                             85.
                                     32.
df_excel[df_excel$class==4,]
## # A tibble: 4 x 5
##
        id class math english science
##
     <dbl> <dbl> <dbl>
                          <dbl>
## 1
       13.
               4.
                    46.
                             98.
                                     65.
## 2
       14.
               4.
                    48.
                             87.
                                     12.
## 3
                    75.
                                     78.
       15.
               4.
                             56.
## 4
       16.
               4.
                    58.
                             98.
                                     65.
df_excel[df_excel$class==5,]
## # A tibble: 4 x 5
##
        id class math english science
##
     <dbl> <dbl> <dbl>
                          <dbl>
                                   <dbl>
## 1
       17.
               5.
                    65.
                             68.
                                     98.
## 2
                    80.
                             78.
                                     90.
       18.
               5.
## 3
       19.
               5.
                    89.
                             68.
                                     87.
## 4
                    78.
       20.
               5.
                            83.
                                     58.
```

# **Including Plots**

You can also embed plots, for example:

```
library(ggplot2)
qplot(class, math, data=df_excel,geom='auto', color=class)
```



Note that the  $\ensuremath{\mathsf{echo}}$  = FALSE parameter was added to the code chunk to prevent printing of the R code that generated the plot.