

Scheduling exercise solution

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Exercise

There are XX groups in the class, the orals must be spread over 6 hours, in two 3-hour sessions. For each group the duration of the oral is about ~20 min + ~10 min for Q&A. We will want to take two 15-minute breaks in the after 1h30 of courses. Write a program that randomly assigns a schedule to each group, write out the list of names and schedules in a table. Have a look on this : https://cran.r-project.org/web/packages/kableExtra/vignettes/awesome_table_in_html.html

Examples

Using Python

```
import pandas as pd

test_py = pd.DataFrame(
    {
        'schedule': ['h1', 'h2', 'h3'],
        'name': ['A', 'B', 'C']
    }
)
```

Using R

```
library(dplyr)

##
## Attaching package: 'dplyr'

## The following objects are masked from 'package:stats':
##
##   filter, lag

## The following objects are masked from 'package:base':
##
##   intersect, setdiff, setequal, union

test_R = data.frame(
  'schedule'=c('h1', 'h2', 'h3'),
  'name'=c('A', 'B', 'C')
)
```

Get Python object in R

Table 1: Schedules using pandas' DF

schedule	name
h1	A
h2	B
h3	C

Table 2: Schedules R's DF

schedule	name
h1	A
h2	B
h3	C

```
library(reticulate)
```

```
py$test_py
```

```
##  schedule name
## 1      h1     A
## 2      h2     B
## 3      h3     C
```

Create latex tables

```
library(kableExtra)
```

```
##
## Attaching package: 'kableExtra'

## The following object is masked from 'package:dplyr':
##
## group_rows
```

```
py$test_py %>%
  kbl(booktabs = T,
      caption = "Schedules using pandas' DF") %>%
  kable_classic(full_width = F, html_font = "Cambria")
```

```
test_R %>%
  kbl(booktabs = T,
      caption = "Schedules R's DF") %>%
  kable_classic(full_width = F, html_font = "Cambria")
```

- then we put `echo = FALSE`, in ````\{r, echo = FALSE\}```` and we don't see the input anymore

Table 3: Schedules using pandas' DF

schedule	name
h1	A
h2	B
h3	C

Table 4: Schedules R's DF

schedule	name
h1	A
h2	B
h3	C