homework_01

David Coomes 1/12/2021

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
                               2.00
##
    Min.
            : 4.0
                    Min.
##
    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
            :25.0
                            :120.00
##
    Max.
                    Max.
```

Including Plots

You can also embed plots, for example:



Note that the echo = FALSE parameter was added to the code chunk to prevent printing of the R code that generated the plot.

```
# make a stupid directory
stupid_dir <- file.path(Sys.getenv("TEMP"), "delete_me_later")</pre>
if(!dir.exists(stupid dir)){
    dir.create(path = stupid dir)
}
# move into the directory
setwd(stupid dir)
# a data frame to write to a file
x <- data.frame(foo = "bar")</pre>
# make some stupidly named files, Dec 16, 2021
write.csv(x = x, file = file.path(stupid_dir, "file 121621.csv"), quote = FALSE, row.names = FALSE)
write.csv(x = x, file = file.path(stupid_dir, "file 12_16_21.csv"), quote = FALSE, row.names = FALSE)
write.csv(x = x, file = file.path(stupid_dir, "file 12-16-21.csv"), quote = FALSE, row.names = FALSE)
write.csv(x = x, file = file.path(stupid_dir, "file 16-12-21.csv"), quote = FALSE, row.names = FALSE)
write.csv(x = x, file = file.path(stupid_dir, "file_121621.csv"), quote = FALSE, row.names = FALSE)
# make some stupidly named files, Dec 17, 2021
write.csv(x = x, file = file.path(stupid_dir, "file 121721.csv"), quote = FALSE, row.names = FALSE)
write.csv(x = x, file = file.path(stupid_dir, "file 12_17_21.csv"), quote = FALSE, row.names = FALSE)
write.csv(x = x, file = file.path(stupid_dir, "file 12-17-21.csv"), quote = FALSE, row.names = FALSE)
write.csv(x = x, file = file.path(stupid_dir, "file 17-12-21.csv"), quote = FALSE, row.names = FALSE)
write.csv(x = x, file = file.path(stupid_dir, "file_121721.csv"), quote = FALSE, row.names = FALSE)
# write two logically named files
write.csv(x = x, file = file.path(stupid_dir, "file_20211216.csv"), quote = FALSE, row.names = FALSE)
write.csv(x = x, file = file.path(stupid_dir, "file_20211217.csv"), quote = FALSE, row.names = FALSE)
message("which file is newer?")
write.csv(list.files(stupid_dir), quote = FALSE, row.names = FALSE)
message("which file is older?")
write.csv(sort(list.files(stupid_dir), decreasing = TRUE), quote = FALSE, row.names = FALSE)
message(paste("You should be convinced that yyyymmdd is a better way to name files by date.\nYour rewar
file_name <- c("Instrument_v.20 - bilingual.docx"
, "Master_Durham.csv"
, "Master Durham.xlsx"
,"Durham emails Nov 30.xlsx"
"NJ emails Nov 30.xlsx"
,"Durham tasks_Nov 30.xlsx"
,"Master_Durham_v2.csv"
, "Master Durham v2.xlsx"
,"NJ emails_December 7.xlsx"
,"NJ phone numbers_Nov 30.xlsx"
,"Pitt phone numbers_December 7.xlsx"
,"Pitt phone numbers_Nov 30.xlsx"
,"Fraud and quota report_v1.xlsx"
,"Fraud and quota report_v2.xlsx"
"Rutgers_people_to_pay_12_11_2020.xlsx"
,"Durham emails_Dec 14.xlsx"
```

```
,"Durham phone numbers_Dec 14.xlsx"
,"Export_1215.7z"
,"NJ emails December 14.xlsx"
,"NJ phone numbers_December 14.xlsx"
,"VR_Dec1420_Durham.xlsx"
,"VR_NJ_Dec1420.xlsx"
"transfer_0105.zip"
,"Fraud and quota report_v3.xlsx"
,"Fraud and quota report_v4.xlsx"
,"test1.dta")
date <-c("2020-10-13",
          "2020-11-30",
          "2020-11-30",
          "2020-12-04",
          "2020-12-04", "2020-12-07", "2020-12-07",
"2020-12-07",
"2020-12-07".
"2020-12-07",
"2020-12-07",
"2020-12-07",
"2020-12-11",
"2020-12-11",
"2020-12-11",
"2020-12-15",
"2020-12-15",
"2020-12-15",
"2020-12-15",
"2020-12-15",
"2020-12-15",
"2020-12-15",
"2021-01-05",
"2021-01-07",
"2021-01-07",
"2021-01-08")
file_name <- c("Instrument_v.20 - bilingual.docx"</pre>
               ,"Master_Durham.csv"
                ,"Master_Durham.xlsx"
               ,"Durham emails_Nov 30.xlsx"
               ,"NJ emails_Nov 30.xlsx"
               ,"Durham tasks_Nov 30.xlsx"
               ,"Master_Durham_v2.csv"
               ,"Master_Durham_v2.xlsx"
               ,"NJ emails_December 7.xlsx"
               ,"NJ phone numbers_Nov 30.xlsx"
               ,"Pitt phone numbers_December 7.xlsx"
```

```
,"Pitt phone numbers_Nov 30.xlsx"
               ,"Fraud and quota report_v1.xlsx"
               ,"Fraud and quota report_v2.xlsx"
               ,"Rutgers_people_to_pay_12_11_2020.xlsx"
               ,"Durham emails_Dec 14.xlsx"
               ,"Durham phone numbers_Dec 14.xlsx"
               ,"Export_1215.7z"
              ,"NJ emails_December 14.xlsx"
              ,"NJ phone numbers_December 14.xlsx"
               "VR_Dec1420_Durham.xlsx"
               "VR_NJ_Dec1420.xlsx"
               "transfer_0105.zip"
               ,"Fraud and quota report_v3.xlsx"
               ,"Fraud and quota report_v4.xlsx"
               ,"test1.dta")
library(tidyverse)
## -- Attaching packages ------ tidyverse 1.3.0 --
## v ggplot2 3.2.1
                     v purrr
                                0.3.3
## v tibble 2.1.3
                     v dplyr 1.0.2
## v tidyr 1.0.0
                   v stringr 1.4.0
## v readr 1.3.1
                     v forcats 0.4.0
## Warning: package 'dplyr' was built under R version 3.6.2
## -- Conflicts ----- tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()
                    masks stats::lag()
table_1 <- tibble(date, file_name)</pre>
new_file_name <- c("instrument_bilingual_20201013.docx", "master_durham_20201130.csv", "master_durham_2</pre>
                  "durham_tasks_20201130.xlsx", "master_durham_20201207.csv", "master_durham_20201207.
                  "pitt_phone_numbers_20201207.xlsx", "pitt_phone_numbers_20201130.xlsx",
                  "fraud_quota_report_20201211.xlsx", "fraud_quota_report_v2_20201211.xlsx", "rutgers_
                  "durham_phone_numbers_20201214.xlsx", "export_20201215.7z", "nj_emails_20201214.xlsx
                  "vr_nj_20201214.xlsx", "transfer_20210105.zip", "fraud_quota_report_20210107.xlsx",
table_2 <- bind_cols(table_1, new_file_name) %>%
 rename(new_file_name="...3")
## New names:
## * NA -> ...3
library(kableExtra)
##
## Attaching package: 'kableExtra'
## The following object is masked from 'package:dplyr':
##
##
      group_rows
kable(table_2) %>% kable_styling(bootstrap_options = c("striped", "condensed"), full_width=TRUE)
```

date	file_name	new_file_name
2020-10-13	Instrument_v.20 - bilingual.docx	$instrument_bilingual_20201013.docx$
2020-11-30	Master_Durham.csv	master_durham_20201130.csv
2020-11-30	Master_Durham.xlsx	master_durham_20201130.xlsx
2020-12-04	Durham emails_Nov 30.xlsx	durham_emails_20201130.xlsx
2020-12-04	NJ emails_Nov 30.xlsx	nj_emails_20201130.xlsx
2020-12-07	Durham tasks_Nov 30.xlsx	durham_tasks_20201130.xlsx
2020-12-07	Master_Durham_v2.csv	master_durham_20201207.csv
2020-12-07	Master_Durham_v2.xlsx	master_durham_20201207.xlsx
2020-12-07	NJ emails_December 7.xlsx	nj_emails_20201207.xlsx
2020-12-07	NJ phone numbers_Nov 30.xlsx	$nj_phone_numbers_20201130.xlsx$
2020-12-07	Pitt phone numbers_December	$pitt_phone_numbers_20201207.xlsx$
2020 12 05	7.xlsx	1 20001100 1
2020-12-07	Pitt phone numbers_Nov 30.xlsx	pitt_phone_numbers_20201130.xlsx
2020-12-11	Fraud and quota report_v1.xlsx	fraud_quota_report_20201211.xlsx
2020-12-11	Fraud and quota report_v2.xlsx	$fraud_quota_report_v2_20201211.xlsx$
2020-12-11		2020tgdsx_people_topay_20201211.xlsx
2020-12-15	Durham emails_Dec 14.xlsx	durham_emails_20201214.xlsx
2020-12-15	Durham phone numbers_Dec	$durham_phone_numbers_20201214.xlsx$
	14.xlsx	
2020-12-15	Export_1215.7z	export_20201215.7z
2020-12-15	NJ emails_December 14.xlsx	nj_emails_20201214.xlsx
2020-12-15	NJ phone numbers_December	nj_phone_numbers_20201214.xlsx
	14.xlsx	
2020-12-15	VR_Dec1420_Durham.xlsx	vr_durham_20201214.xlsx
2020-12-15	VR_NJ_Dec1420.xlsx	vr_nj_20201214.xlsx
2021-01-05	$transfer_0105.zip$	$transfer_20210105.zip$
2021-01-07	Fraud and quota report_v3.xlsx	fraud_quota_report_20210107.xlsx
2021-01-07	Fraud and quota report_v4.xlsx	fraud_quota_report_v2_20210107.xlsx
2021-01-08	test1.dta	test 20210108.dta