hw_1.R

edwin

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title: "hw_1" author: "Edwin Rivas Meraz" date: "1/28/2020" output:

```
#'html_document:
    #'keep_md: true
x \leftarrow c(1,2,4)
q < -c(x,x,8)
#Problem 3
x[4]
## [1] NA
#Problem 4
s \leftarrow sd(q)
sd(q)
## [1] 2.478479
s
## [1] 2.478479
#Problem 5
paste("Edwin", "Rivas", "Meraz")
## [1] "Edwin Rivas Meraz"
#assign value to object "m"
m <- 100
1s()
## [1] "m" "q" "s" "x"
#Problem 6
rm(m)
1s()
## [1] "q" "s" "x"
rm(list=ls())
1s()
## character(0)
```

```
oddcount <- function(x) {
  print(x)
  k <- 0
  print(paste("k is initialized as",k))
  for(n in x) {
    print(paste("current x value being tested is",n))
    if(n \% 2 == 1)
      k < - k+1
      print(paste(n, "is an odd number!"))
    } else
    {
      print(paste(n,"is an even number!"))
    print(paste("The final is currently",k))
  print(paste("The final k is",k))
  return(k)
#Problem 7
oddcount (x \leftarrow c(1,2,3,7,9))
## [1] 1 2 3 7 9
## [1] "k is initialized as 0"
## [1] "current x value being tested is 1"
## [1] "1 is an odd number!"
## [1] "The final is currently 1"
## [1] "current x value being tested is 2"
## [1] "2 is an even number!"
## [1] "The final is currently 1"
## [1] "current x value being tested is 3"
## [1] "3 is an odd number!"
## [1] "The final is currently 2"
## [1] "current x value being tested is 7"
## [1] "7 is an odd number!"
## [1] "The final is currently 3"
## [1] "current x value being tested is 9"
## [1] "9 is an odd number!"
## [1] "The final is currently 4"
## [1] "The final k is 4"
## [1] 4
#Problem 8
evencount <- function(x) {</pre>
  print(x)
  k <- 0
  print(paste("k is initialized as",k))
  for(n in x) {
    print(paste("current x value being tested is",n))
```

```
if(n \% 2 == 0)
      k < - k+1
      print(paste(n, "is an odd number!"))
    } else
      print(paste(n,"is an even number!"))
    print(paste("The final is currently",k))
  print(paste("The final k is",k))
  return(k)
}
evencount (x \leftarrow c(1,2,3,7,9))
## [1] 1 2 3 7 9
## [1] "k is initialized as 0"
## [1] "current x value being tested is 1"
## [1] "1 is an even number!"
## [1] "The final is currently 0"
## [1] "current x value being tested is 2"
## [1] "2 is an odd number!"
## [1] "The final is currently 1"
## [1] "current x value being tested is 3"
## [1] "3 is an even number!"
## [1] "The final is currently 1"
## [1] "current x value being tested is 7"
## [1] "7 is an even number!"
## [1] "The final is currently 1"
## [1] "current x value being tested is 9"
## [1] "9 is an even number!"
## [1] "The final is currently 1"
## [1] "The final k is 1"
## [1] 1
# 9
```

- Integrity of data
- Portability of the project
- Helps kickstart a project after a hiatus
- Helps introduce others to your project
- Helps present your data

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- Treat data as read only
- Treat generated output as disposable
- Separate function definition and application

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C:\Program Files\RStudio

```
# 12
```

/Users/edwin/Program Files/RStudio/

```
# 13
```

C:\Users\edwin\Environmental Data Analysis\ES207_hw1

```
# 14
```

C:\Users\edwin\Environmental Data Analysis

```
# 15
```

/Users/edwin/Environmental Data Analysis/ES207_hw1 /Users/edwin/Environmental Data Analysis

```
# 16-17
```

Installed

```
# 18
```

https://github.com/erivasmeraz/ES207_hw1.git

```
# 19
#code from https://github.com/dylanbeaudette/soiltexture.git

#setwd( "D:/Users/julienm/Documents/_WORKS/_PROJECTS/r_packages/soiltexture/w
ww" )

#library( "markdown" )

#markdownToHTML(
# file = "index.md",
# output = "index.html",
# title = "soiltexture: The Soil Texture Wizard",
# encoding = "UTF-8" )

#library( "knitr" )

#knit2html(
# input = "FAQ.Rmd",
# output = "FAQ.html",
# output = "FAQ.html",
# title = "soiltexture: FAQ",
# encoding = "UTF-8" )
```

The code starts by setting a working directory to the folder where the file 'index.md' is located.

The package markdown is called which contains the function markdowntoHTML markdowntoHTML transforms an .md file into an HTML file

#The arguments serve to:

- input: Give a pathname to read the file (index.md)
- output: Give a pathname of a file to write to (index.html)
- title: Title the HTML soiltexture: The Soil Texture Wizard
- encoding: This argument is ignored because this function always assumes the file is encoded in UTF-8

The package knitr is called which contains the function knit2html

knit2html knits an .Rmd file into an HTML file

#The arguments serve to:

- Give a pathname to read the file (FAQ.md)
- Give a pathname of a file to write to (FAQ.html)
- Title the HTML soiltexture: The Soil Texture Wizard
- This argument is ignored because this function always assumes the file is encoded in UTF-8

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attached

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erivasmeraz