

Sanchez-Kevin-ADA-Homework-1

Kevin Sanchez

2/4/2020

Challenge 1

quote <- "There is grandeur in this view of life, with its several powers, having been originally breathed by the Creator into a few forms or into one; and that, whilst this planet has gone circling on according to the fixed law of gravity, from so simple a beginning endless forms most beautiful and most wonderful have been, and are being evolved."

```
quote_modified <- gsub("[[:punct:]]", "", quote)
split_quote <- str_split(quote_modified, " ", n = Inf, simplify = FALSE)
split_quote_modified <- split_quote[[1]]
(every_fourth <- split_quote_modified[seq(from = 1, to = 60, by = 4)])
(sort(every_fourth, decreasing = TRUE))
```

Challenge 2

```
m1 <- matrix(data = seq(from = 1, to = 159, by = 2), nrow = 8, ncol = 10, byrow = FALSE)
(m1[5, 2])
(m1[5:7, ])
m2 <- m1[3:6, 4:9]
class(m2) The class of m2 is a matrix.
mode(m2) The mode of m2 is numeric.
```

Challenge 3

```
a <- array(data = 400:1, dim = c(5, 5, 4, 4))
a[1, 1, 1, 2] The output is 300.
a[2, 3, 2, ] The output is 364, 264, 164, and 64.
a[1:5, 1:5, 3, 3] The output is a 5 x 5 matrix with values from 150 to 126 in descending order.
```

Challenge 4

```
Primates <- list( Strepsirrhini <- list( Lorisiformes <- list( Lorisioidea <- c("Lorisidae", "Galagidae")), Lemu-
riformes <- list( Lemuroidea <- c("Cheirogaleidae", "Lepilemuridae", "Indriidae", "Lemuridae", "Daubentoni-
idae"))), Haplorrhini <- list( Tarsiiformes <- list( Tarsiioidea <- "Tarsiidae"), Simiiformes <- list( Platyrrhini <-
```

```
list( Ceboidea <- c("Cebidae", "Atelidae", "Pitheciidae")), Catarrhini <- list( Hominoidea <- c("Hylobatidae",  
"Hominidae"), Cercopithecoidea <- "Cercopithecidae"))))
```

```
nwm <- Primates[[2]][[2]][[1]]
```

```
class(nwm) The class of nwm is a list.
```

```
mode(nwm) The mode of nwm is also a list.
```

```
Tarsiiformes$Tarsiidae
```