p8105_hw1_sl4836

Hun

9/27/2021

```
random_sample_from_std_norm_dist <- rnorm(10, mean = 0, sd = 1)

logical_vector <- ifelse(random_sample_from_std_norm_dist>0, TRUE, FALSE)

character_vector <- rep(c("apple", "banana", "peach"),length.out = 10)

factor_vector <- factor(rep(c("low","middle","high"), length.out = 10))
```

```
random_sample_from_std_norm_dist
```

```
##  [1] -1.2910127 -0.6330793  0.9842182 -1.0246074  0.4187413  0.6275202
##  [7] -0.1883283 -0.7099514 -0.5219254 -2.1453754
```

```
logical_vector
```

```
##  [1] FALSE FALSE  TRUE FALSE  TRUE  TRUE FALSE FALSE FALSE FALSE
```

```
character_vector
```

```
##  [1] "apple"  "banana" "peach"  "apple"  "banana" "peach"  "apple"  "banana"
##  [9] "peach"  "apple"
```

```
factor_vector
```

```
##  [1] low    middle high   low    middle high   low    middle high   low
## Levels: high low middle
```

```
library(tidyverse)

data("penguins", package = "palmerpenguins")

name_variables <- names(penguins)

nrow <- nrow(penguins)
ncol <- ncol(penguins)

levels_species <- levels(penguins$species)
levels_sex <- levels(penguins$sex)
```

```r
levels_island <- levels(penguins$island)

mean_bill_length <- penguins %>% drop_na() %>% summarise(mean(bill_length_mm)) %>% round(digits = 3)

sd_bill_length <- penguins %>% drop_na() %>% summarise(sd(bill_length_mm)) %>% round(digits = 3)

mean_bill_depth <- penguins %>% drop_na() %>% summarise(mean(bill_depth_mm)) %>% round(digits = 3)

sd_bill_depth <- penguins %>% drop_na() %>% summarise(sd(bill_depth_mm)) %>% round(digits = 3)

mean_flipper_length <- penguins %>% drop_na() %>% summarise(mean(flipper_length_mm)) %>% round(digits =

sd_flipper_length <- penguins %>% drop_na() %>% summarise(sd(flipper_length_mm)) %>% round(digits = 3)

mean_body_mass <- penguins %>% drop_na() %>% summarise(mean(body_mass_g)) %>% round(digits = 3)

sd_body_mass <- penguins %>% drop_na() %>% summarise(sd(body_mass_g)) %>% round(digits = 3)
```

The size of the dataset is **344** x **8.**

There are **8** variables: *species, island, bill_length_mm, bill_depth_mm, flipper_length_mm, body_mass_g, sex, year.*

The levels of **speices** are **Adelie, Chinstrap, Gentoo**

The levels of **island** are **Biscoe, Dream, Torgersen**

The levels of **sex** are **female, male**

The **mean** of the bill_length_mm is **43.993mm.**

The **standard deviation** of the bill_length_mm is **5.469.**

The **mean** of the bill_depth_mm is **17.165mm.**

The **standard deviation** of the bill_depth_mm is **1.969.**

The **mean** of the flipper_length_mm is **200.967mm.**

The **standard deviation** of the flipper_length_mm is **14.016.**

The **mean** of the body_mass_g is **4207.057g.**

The **standard deviation** of the body_mass_g is **805.216.**