

CODECHUNKPortfolio

Bandar Alsharhan

2024-04-30

```
knitr::opts_chunk$set(echo = TRUE, message = FALSE, warning = FALSE)
invisible(suppressPackageStartupMessages({
  library(tidyverse)
  library(kableExtra)
}))

# Download the penguin data directly from a URL
path2data <- "https://dataverse.harvard.edu/api/access/datafile/6903364"
gspace <- read_csv(path2data)

table <-
  gspace |>
  group_by(Major_Geo_Region) |>
  summarise(
    obs = n(),
    avg = mean(annual_avg_2020, na.rm = TRUE),
    weighted_avg = mean(annual_weight_avg_2020, na.rm = TRUE)
  )
# Output as table
kable(table, digits = 1)
```

| Major_Geo_Region | obs | avg | weighted_avg |
|---------------------------------|-----|-----|--------------|
| Africa | 154 | 0.3 | 0.2 |
| Asia | 569 | 0.3 | 0.3 |
| Europe | 128 | 0.3 | 0.3 |
| Latin America and the Caribbean | 120 | 0.3 | 0.3 |
| Northern America | 58 | 0.3 | 0.3 |
| Oceania | 9 | 0.3 | 0.3 |

- Brief explanation: This code snippet fixes errors in the original script and then calculates summary statistics for average urban greenspace (annual_avg_2020) by major geographical regions (Major_Geo_Region) using the dplyr package for data manipulation and knitr for generating a nicely formatted table. This code demonstrates effective use of data manipulation and summarization techniques that was done with dplyr, proper handling of missing data, and generation of neat output using kable for presentation-ready tables in R.