R version change [4.4.1 -> 4.4.2] detected when restoring session; search path not restored

> import matplotlib.pyplot as plt

Error: unexpected symbol in "import matplotlib.pyplot"

> import matplotlib.pyplot as plt

Error: unexpected symbol in "import matplotlib.pyplot"

> import matplotlib.pyplot as plt

Error: unexpected symbol in "import matplotlib.pyplot"

> # 載入必要的套件

> library(ggplot2)

Need help getting started? Try the R Graphics Cookbook:

https://r-graphics.org

> > # 假設的台灣近10年出生率與生育率數據

> years <- c(2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023)

> birth\_rate <- c(9.6, 9.4, 9.1, 8.9, 8.5, 8.0, 7.7, 7.5, 7.3, 7.1) # 每千人出生數

> fertility\_rate <- c(1.2, 1.14, 1.1, 1.05, 1.0, 0.98, 0.96, 0.93, 0.91, 0.89) # 每名婦女生育孩子數

> > # 建立資料框架 (data frame)

> data <- data.frame(years, birth\_rate, fertility\_rate)

> > # 計算平均出生率與生育率

> average\_birth\_rate <- mean(birth\_rate)

> average\_fertility\_rate <- mean(fertility\_rate)

> > cat("過去10年出生率的平均值: ", round(average\_birth\_rate, 2), " 每千人\n")

過去10年出生率的平均值: 8.31 每千人

> cat("過去10年生育率的平均值: ", round(average\_fertility\_rate, 2), " 每名婦女生育孩子數\n")

過去10年生育率的平均值: 1.02 每名婦女生育孩子數

> > # 繪製趨勢圖

> # 1. 出生率趨勢圖

> ggplot(data, aes(x = years, y = birth\_rate)) +

+ geom\_line(color = "blue", size = 1) +

+ geom\_point(color = "blue", size = 3) +

+ labs(title = "台灣近10年出生率趨勢",

+ x = "年份", y = "每千人出生數") +

+ theme\_minimal() +

+ theme(plot.title = element\_text(hjust = 0.5))

Warning message:

Using `size` aesthetic for lines was deprecated in ggplot2 3.4.0.

ℹ Please use `linewidth` instead.

This warning is displayed once every 8 hours.

Call `lifecycle::last\_lifecycle\_warnings()` to see where this warning was generated.

> > # 2. 生育率趨勢圖

> ggplot(data, aes(x = years, y = fertility\_rate)) +

+ geom\_line(color = "red", size = 1) +

+ geom\_point(color = "red", size = 3) +

+ labs(title = "台灣近10年生育率趨勢",

+ x = "年份", y = "每名婦女生育孩子數") +

+ theme\_minimal() +

+ theme(plot.title = element\_text(hjust = 0.5))

> Session restored from your saved work on 2024-Dec-25 05:55:08 UTC (4 days ago)