410921208 楊右宇

from selenium import webdriver

from time import sleep

from selenium.webdriver.common.by import By

from selenium.webdriver.chrome.service import Service

import matplotlib.pyplot as plt

import matplotlib.image as img

import requests

import pandas as pd

import numpy as np

plt.rcParams['font.sans-serif']=['Microsoft JhengHei'] # 自訂字體

plt.rcParams['axes.unicode\_minus']=False # 為了正常顯示正負號

df = pd.read\_csv("marriageTaoyuanData.csv")

df = df.drop(['Nationality - Female', 'Mainland Hong Kong and Macao Regions - Female', 'Foreign Nationality - Female'], 1)

fig = plt.figure(figsize = (16, 16), facecolor = "lightblue")

fig.suptitle('Taoyuan Marriage Population', fontsize=16)

width = 0.4

ax1 = fig.add\_subplot(211)

bars1 = ax1.barh(df.iloc[:, 0] + width / 2, df.iloc[:, 1], height=width, label='Male', tick\_label = df.iloc[:, 0])

bars2 = ax1.barh(df.iloc[:, 0] - width / 2, df.iloc[:, 2], height=width, label='Female')

ax1.bar\_label(bars1, color='blue')

ax1.bar\_label(bars2, color='orange')

plt.xlabel("population")

plt.ylabel("year")

plt.title("Total marriage population")

plt.legend(loc=4)

ax2 = fig.add\_subplot(212)

ax2.bar(df.iloc[:, 0], df.iloc[:, 5], tick\_label = df.iloc[:, 0], label='Foreign')

ax2.bar(df.iloc[:, 0], df.iloc[:, 4], bottom=0, label='Mainland')

plt.xticks(rotation = 90)

plt.xlabel('year')

plt.ylabel('population')

plt.title("Mainland & Foreign marriage population")

plt.legend(loc=2)

plt.tight\_layout()

df

