

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

url = "https://worldpopulationreview.com/countries/cities/malaysia"
table = pd.read_html(url)
df = table[0].iloc[:-1, :]

df1 = df[df.iloc[:, 1] > 100000]
df2 = df[df.iloc[:, 1] < 100000]

fig = plt.figure(figsize = (20, 25), facecolor = "lightblue")
# fig.suptitle('Taoyuan Marriage Population', fontsize=16)

width = 0.4
ax1 = fig.add_subplot(211)
ax1.plot(df2.iloc[:, 0], df2.iloc[:, 1], "g-o")
plt.xticks(rotation = 90)
plt.xlabel("city")
plt.ylabel("population")
plt.title("low population city")

ax2 = fig.add_subplot(212)
ax2.barh(df1.iloc[:, 0], df1.iloc[:, 1])
plt.ylabel("city")
```

```
plt.xlabel("population")
plt.title("high population city")
```

```
plt.tight_layout()
fig.savefig("410921208_mid-2Crawplot.jpg")
df1.head(10)
df2.head(10)
```

```
In [34]: from selenium import webdriver
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df1.head(10)
# df2.head(10)
```

Out[34]:

<b>Name</b>	<b>2022 Population</b>
Semenyih	92491
Marudi	90100
Port Dickson	89198
Cukai	82425
Putatan	78340
Keningau	77650
Ulu Tiram	75350
Labuan	73653
Taman Senai	73176
Donggongan	71585

<b>Name</b>	<b>2022 Population</b>
Kota Bharu	1459994
Kuala Lumpur	1453975
Klang	879867
Kampung Baru Subang	833571
Johor Bahru	802489
Subang Jaya	708296
Ipoh	673318
Kuching	570407
Petaling Jaya	520698
Shah Alam	481654

