

高雄科技大學

智慧商務系

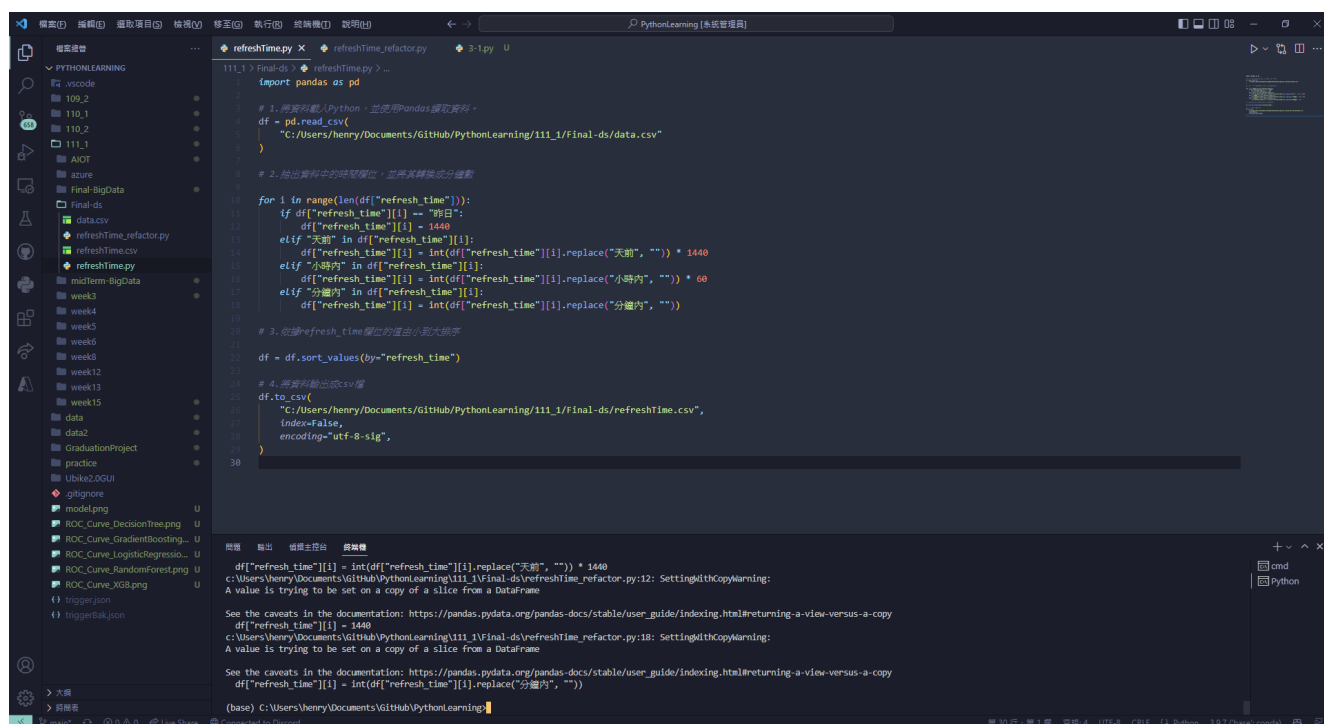
資料結構期末專題

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專題內容說明：

我是以大二的期末專題，高雄市租屋市場分析進行小修改，加入了快速排序，讓呈現出來的資料以更新時間為排序目標，由小到大呈現。



```
111_1 > Final-ds > refreshTime.py > ...
1 import pandas as pd
2
3 # 1. 讀取資料/Pandas，並使用Pandas讀取資料。
4 df = pd.read_csv(
5     "C:/Users/henry/Documents/GitHub/PythonLearning/111_1/Final-ds/data.csv"
6 )
7
8 # 2. 給出資料中的時間單位，並將其轉換成分鐘數
9
10 for i in range(len(df["refresh_time"])):
11     if df["refresh_time"][i] == "昨日":
12         df["refresh_time"][i] = 1440
13     elif "天前" in df["refresh_time"][i]:
14         df["refresh_time"][i] = int(df["refresh_time"][i].replace("天前", "")) * 1440
15     elif "小時內" in df["refresh_time"][i]:
16         df["refresh_time"][i] = int(df["refresh_time"][i].replace("小時內", "")) * 60
17     elif "分鐘內" in df["refresh_time"][i]:
18         df["refresh_time"][i] = int(df["refresh_time"][i].replace("分鐘內", ""))
19
20 # 3. 依照refresh_time 欄位的值由小到大排序
21
22 df = df.sort_values(by="refresh_time")
23
24 # 4. 將資料輸出成csv檔
25 df.to_csv(
26     "C:/Users/henry/Documents/GitHub/PythonLearning/111_1/Final-ds/refreshTime.csv",
27     index=False,
28     encoding="utf-8-sig",
29 )
30
```

問題 輸出 檢視主界面 檢視變

```
df["refresh_time"][i] = int(df["refresh_time"][i].replace("天前", "")) * 1440
c:\Users\henry\Documents\GitHub\PythonLearning\111_1\Final-ds\refreshTime_refactor.py:12: SettingWithCopyWarning:
A value is trying to be set on a copy of a slice from a DataFrame
See the caveats in the documentation: https://pandas.pydata.org/pandas-docs/stable/user_guide/indexing.html#returning-a-view-versus-a-copy
df["refresh_time"][i] = 1440
c:\Users\henry\Documents\GitHub\PythonLearning\111_1\Final-ds\refreshTime_refactor.py:18: SettingWithCopyWarning:
A value is trying to be set on a copy of a slice from a DataFrame
See the caveats in the documentation: https://pandas.pydata.org/pandas-docs/stable/user_guide/indexing.html#returning-a-view-versus-a-copy
df["refresh_time"][i] = int(df["refresh_time"][i].replace("分鐘內", ""))
(base) C:\Users\henry\Documents\GitHub\PythonLearning
```

修改前

```
111.1 > Final-ds > refreshTime_refactor.py > ...
12  def refreshTime_refactor.py > ...
13  df["refresh_time"][i] = 1440
14  elif "天前" in df["refresh_time"][i]:
15  df["refresh_time"][i] = int(df["refresh_time"][i].replace("天前", "")) * 1440
16  elif "小时内" in df["refresh_time"][i]:
17  df["refresh_time"][i] = int(df["refresh_time"][i].replace("小时内", "")) * 60
18  elif "分钟内" in df["refresh_time"][i]:
19  df["refresh_time"][i] = int(df["refresh_time"][i].replace("分钟内", ""))
20
21  # 3. 调用quickSort对df["refresh_time"] 修改后的值由小到大排序
22
23  def quickSort(arr):
24  if len(arr) <= 1:
25  return arr
26  pivot = arr[len(arr) // 2]
27  left = [x for x in arr if x < pivot]
28  middle = [x for x in arr if x == pivot]
29  right = [x for x in arr if x > pivot]
30  return quickSort(left) + middle + quickSort(right)
31
32  df["refresh_time"] = quickSort(df["refresh_time"])
33
34  # 4. 将数据输出成csv
35  df.to_csv(
36  "c:/Users/henry/Documents/GitHub/PythonLearning/111_1/Final-ds/refreshTime_refactor.csv",
37  index=False,
38  encoding="utf-8-sig",
39  )
40
41
```

问题 输出 调试主窗口 找错

df["refresh_time"][i] = int(df["refresh_time"][i].replace("天前", "")) * 1440
df["refresh_time"][i] = 1440
c:\Users\henry\Documents\GitHub\PythonLearning\111_1\Final-ds\refreshTime_refactor.py:12: SettingWithCopyWarning:
A value is trying to be set on a copy of a slice from a DataFrame

See the caveats in the documentation: https://pandas.pydata.org/pandas-docs/stable/user_guide/indexing.html#returning-a-view-versus-a-copy
df["refresh_time"][i] = 1440
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A value is trying to be set on a copy of a slice from a DataFrame

See the caveats in the documentation: https://pandas.pydata.org/pandas-docs/stable/user_guide/indexing.html#returning-a-view-versus-a-copy
df["refresh_time"][i] = int(df["refresh_time"][i].replace("分钟内", ""))

(base) C:\Users\henry\Documents\GitHub\PythonLearning

修改後