

# 高雄科技大學

## 智慧商務系

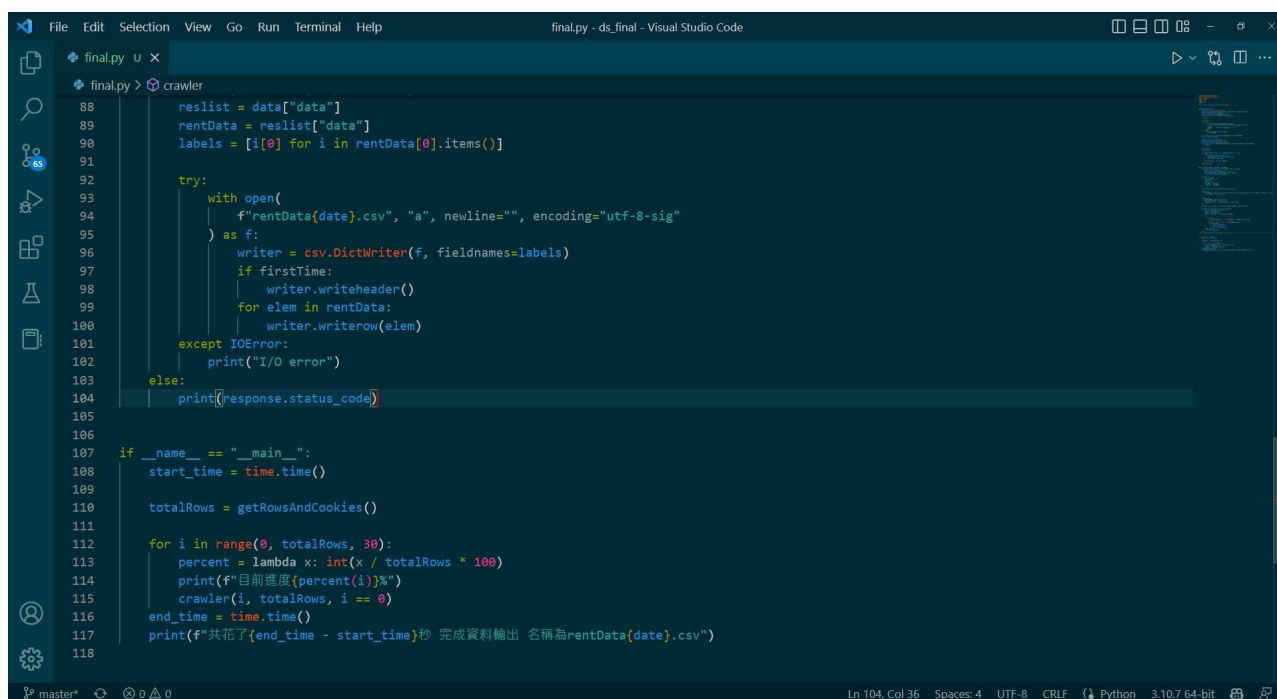
### 資料結構期末專題

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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租金為排序目標，由小到大呈現。



```
File Edit Selection View Go Run Terminal Help
final.py - ds_final - Visual Studio Code

final.py u x
final.py > crawler
88     reslist = data["data"]
89     rentData = reslist["data"]
90     labels = [i[0] for i in rentData[0].items()]
91
92     try:
93         with open(
94             f"rentData{date}.csv", "a", newline="", encoding="utf-8-sig"
95         ) as f:
96             writer = csv.DictWriter(f, fieldnames=labels)
97             if firstTime:
98                 writer.writeheader()
99             for elem in rentData:
100                 writer.writerow(elem)
101     except IOError:
102         print("I/O error")
103     else:
104         print(response.status_code)
105
106
107 if __name__ == "__main__":
108     start_time = time.time()
109
110     totalRows = getRowsAndCookies()
111
112     for i in range(0, totalRows, 30):
113         percent = lambda x: int(x / totalRows * 100)
114         print(f"目前進度{percent(i)}%")
115         crawler(i, totalRows, i == 0)
116     end_time = time.time()
117     print(f"共花了{end_time - start_time}秒 完成資料輸出 名稱為rentData{date}.csv")
118
```

Ln 104, Col 36 Spaces: 4 UTF-8 CRLF Python 3.10.7 64-bit

## 修改前

```
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final_refactor.py - ds_final - Visual Studio Code

final_refactor.py 3, U X
final_refactor.py > ...
98 writer.writelineheader()
99 for elem in rentData:
100     writer.writerow(elem)
101 except IOError:
102     print("I/O error")
103 else:
104     print(response.status_code)
105
106 if __name__ == "__main__":
107     start_time = time.time()
108
109     totalRows = getRowsAndCookies()
110
111     for i in range(0, totalRows, 30):
112         percent = lambda x: int(x / totalRows * 100)
113         print(f"目前進度{percent(i)}%")
114         crawler(i, totalRows, i == 0)
115     end_time = time.time()
116     print(f"共花了{end_time - start_time}秒 完成資料輸出 名稱為rentData{date}.csv")
117
118 def quick_sort_by_price(arr):
119     if len(arr) <= 1:
120         return arr
121     pivot = arr[len(arr) // 2]['price']
122     left = [x for x in arr if x['price'] < pivot]
123     middle = [x for x in arr if x['price'] == pivot]
124     right = [x for x in arr if x['price'] > pivot]
125     return quick_sort_by_price(left) + middle + quick_sort_by_price(right)
126
127 print(quick_sort_by_price(rentData(date)))
128
```

Ln 127, Col 27 Spaces: 4 UTF-8 CRLF Python 3.10.7 64-bit

修改後(因為沒有真的讀取資料, 所以有跳錯)