

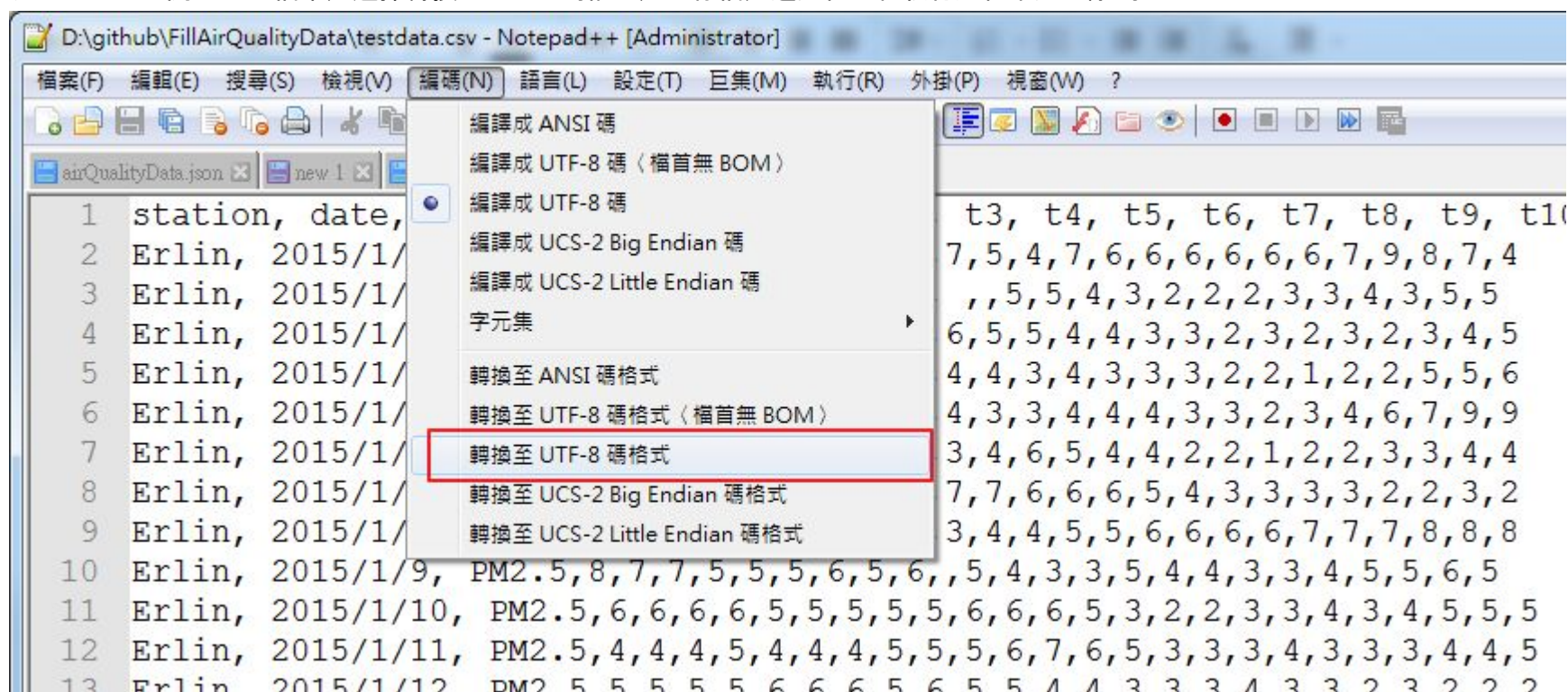
步驟 1. 安裝JAVA

請參考 https://www.java.com/zh_TW/download/help/windows_manual_download.xml

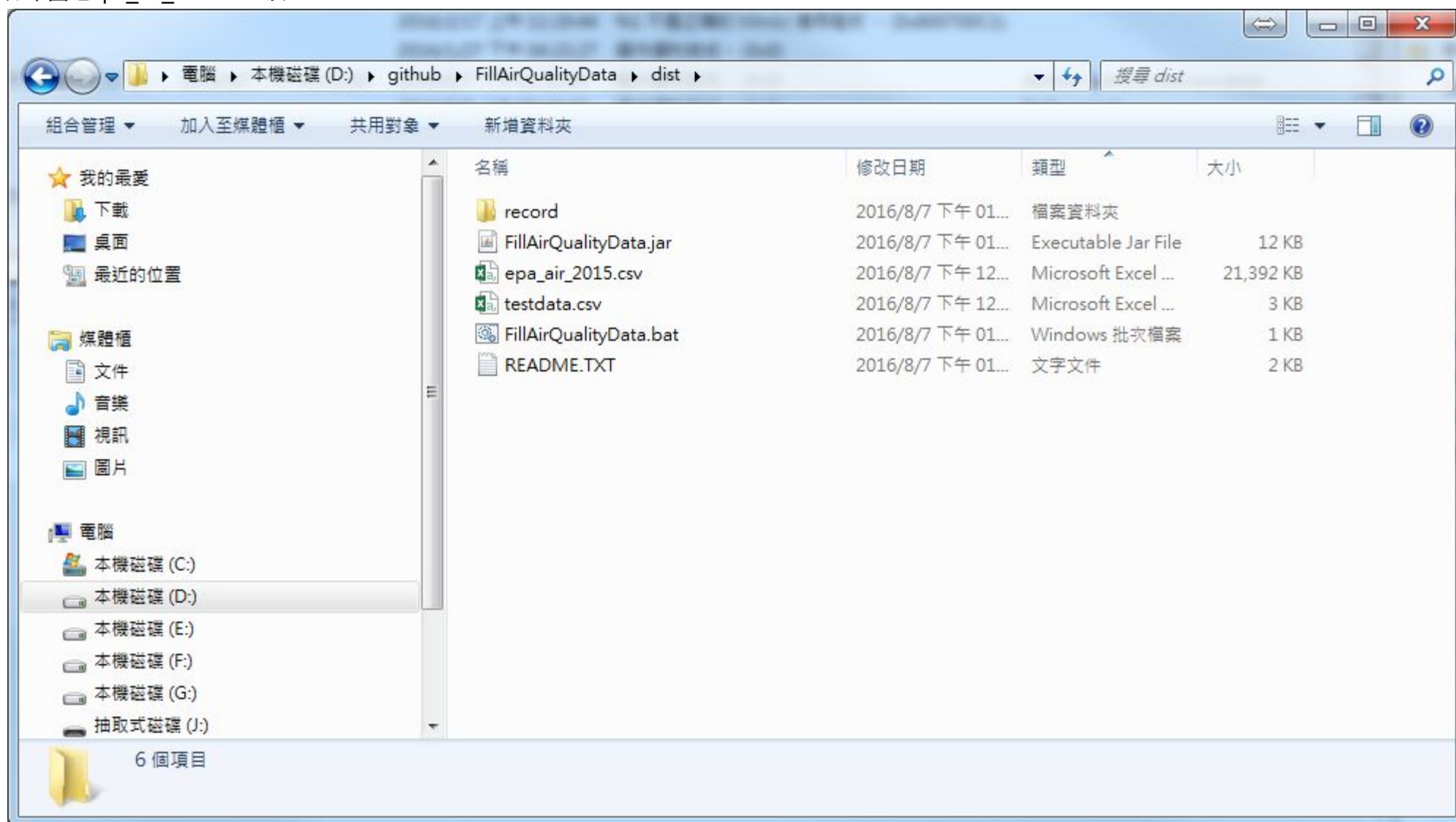
步驟 2. 安裝NotePad++ <https://notepad-plus-plus.org/>

步驟 3.

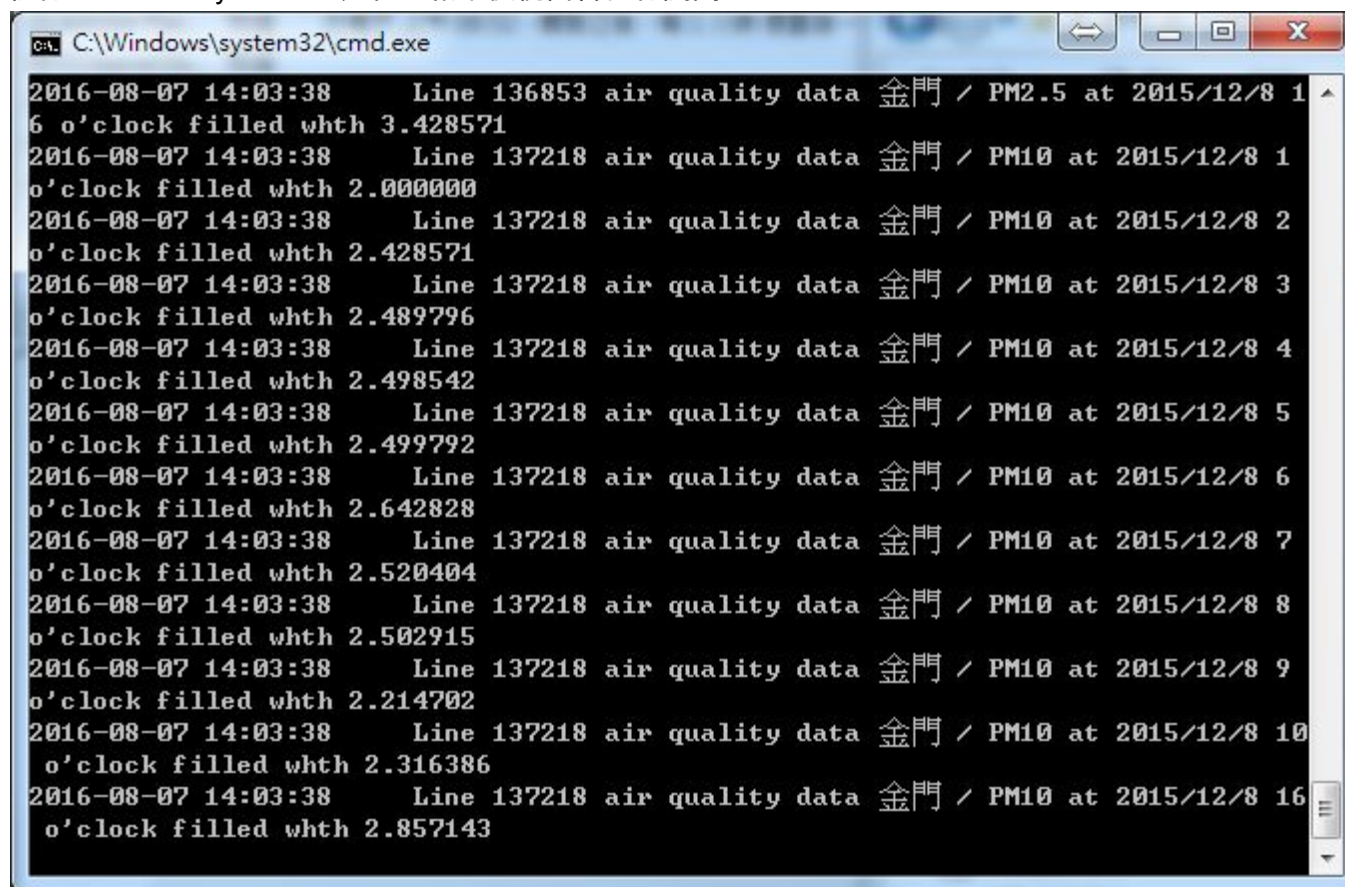
- 檢查csv檔案是否按照station,date,air pollutant,t0,t1,t2,t3,t4,t5,t6,t7,t8,t9,t10,t11,t12,t13,t14,t15,t16,t17,t18,t19,t20,t21,t22,t23的順序存放
前三欄代表測站、日期、監測項目，其他欄位 t0~t23表示 0-1 am, 1-2 am，一直到23-0 的逐時值
- 以NotePad++開啟CSV檔案，選擇轉換至UTF-8碼格式，並存檔，避免程式在執行過程中產生亂碼



- c. 將尚未處理過的空氣品質資料csv檔案，放在FillAirQualityData.bat所在的資料夾裡面
如本圖之epa_air_2015.csv 及 testdata.csv

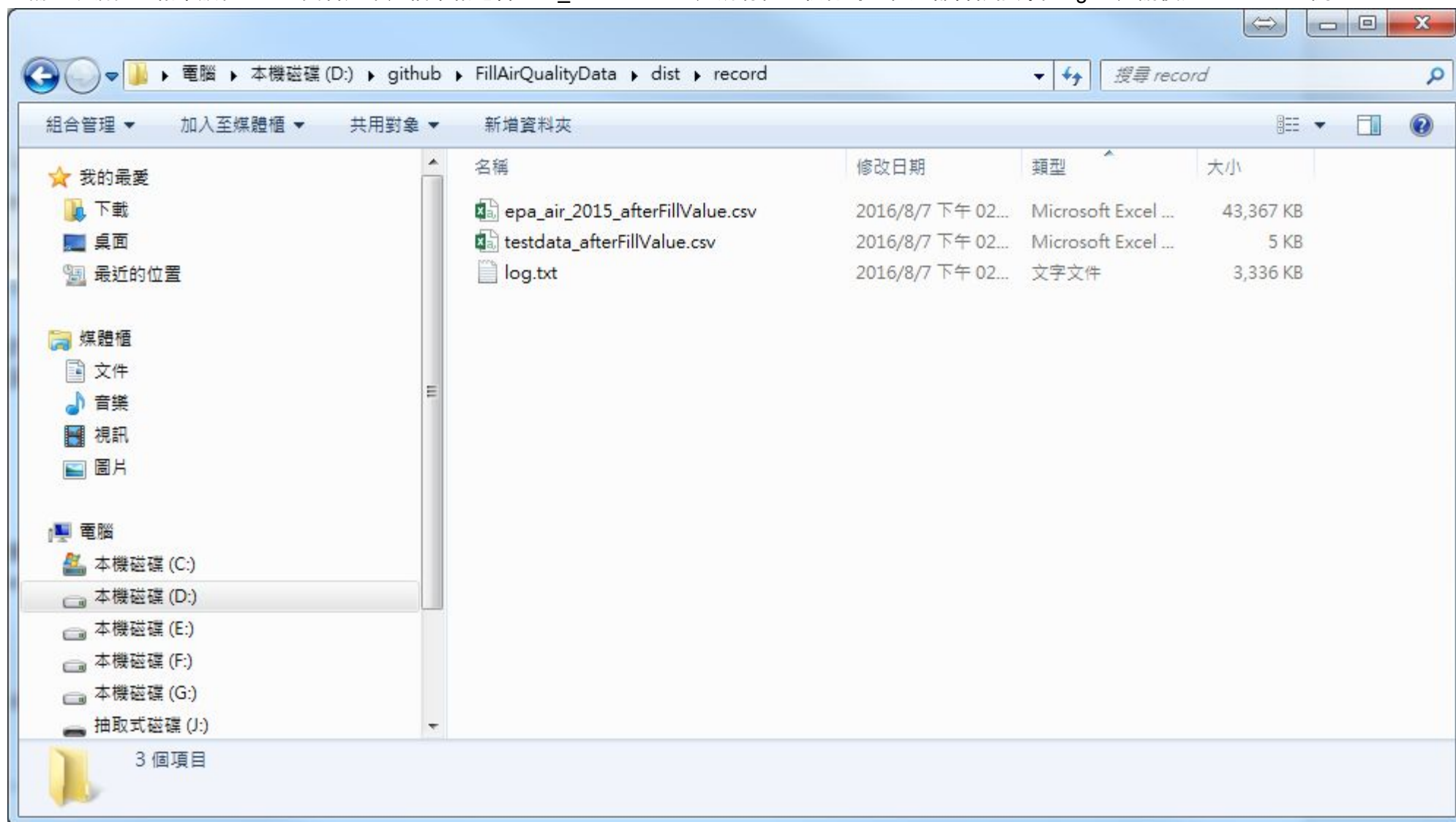


d. 執行FillAirQualityData.bat, 程式結束後視窗會自行關閉



```
C:\Windows\system32\cmd.exe
2016-08-07 14:03:38      Line 136853 air quality data 金門 / PM2.5 at 2015/12/8 1
6 o'clock filled whth 3.428571
2016-08-07 14:03:38      Line 137218 air quality data 金門 / PM10 at 2015/12/8 1
o'clock filled whth 2.000000
2016-08-07 14:03:38      Line 137218 air quality data 金門 / PM10 at 2015/12/8 2
o'clock filled whth 2.428571
2016-08-07 14:03:38      Line 137218 air quality data 金門 / PM10 at 2015/12/8 3
o'clock filled whth 2.489796
2016-08-07 14:03:38      Line 137218 air quality data 金門 / PM10 at 2015/12/8 4
o'clock filled whth 2.498542
2016-08-07 14:03:38      Line 137218 air quality data 金門 / PM10 at 2015/12/8 5
o'clock filled whth 2.499792
2016-08-07 14:03:38      Line 137218 air quality data 金門 / PM10 at 2015/12/8 6
o'clock filled whth 2.642828
2016-08-07 14:03:38      Line 137218 air quality data 金門 / PM10 at 2015/12/8 7
o'clock filled whth 2.520404
2016-08-07 14:03:38      Line 137218 air quality data 金門 / PM10 at 2015/12/8 8
o'clock filled whth 2.502915
2016-08-07 14:03:38      Line 137218 air quality data 金門 / PM10 at 2015/12/8 9
o'clock filled whth 2.214702
2016-08-07 14:03:38      Line 137218 air quality data 金門 / PM10 at 2015/12/8 10
o'clock filled whth 2.316386
2016-08-07 14:03:38      Line 137218 air quality data 金門 / PM10 at 2015/12/8 16
o'clock filled whth 2.857143
```

e. 已補上缺漏值的結果放在record資料夾中，檔案結尾會加上_afterFillValue，所有程式執行時的經過都會被記錄在log.txt，請使用NotePad++開啟




```
D:\github\FillAirQualityData\dist\record\log.txt - Notepad++ [Administrator]
檔案(F) 編輯(E) 搜尋(S) 檢視(V) 編碼(N) 語言(L) 設定(T) 巨集(M) 執行(R) 外掛(P) 視窗(W) ?

airQualityData.json new 1 log.txt
1 2016-08-07 13:36:56 Start air quality open data downloader!
2 2016-08-07 13:36:56 Start reading the record file
3 2016-08-07 13:36:56 Line 1 has ParseException
4 2016-08-07 13:36:58 Successfully reading the record file
5 2016-08-07 13:36:59 Line 8281 air quality data 三重 / PM2.5 at 2015/9/7 1 o'clock filled whth 7.000000
6 2016-08-07 13:36:59 Line 8281 air quality data 三重 / PM2.5 at 2015/9/7 2 o'clock filled whth 7.857143
7 2016-08-07 13:36:59 Line 8281 air quality data 三重 / PM2.5 at 2015/9/7 4 o'clock filled whth 7.568513
8 2016-08-07 13:36:59 Line 8281 air quality data 三重 / PM2.5 at 2015/9/7 5 o'clock filled whth 7.366930
9 2016-08-07 13:36:59 Line 8281 air quality data 三重 / PM2.5 at 2015/9/7 3 o'clock filled whth 7.979592
10 2016-08-07 13:36:59 Line 8281 air quality data 三重 / PM2.5 at 2015/9/7 6 o'clock filled whth 6.195275
11 2016-08-07 13:36:59 Line 8281 air quality data 三重 / PM2.5 at 2015/9/7 7 o'clock filled whth 5.456468
12 2016-08-07 13:36:59 Line 8281 air quality data 三重 / PM2.5 at 2015/9/7 8 o'clock filled whth 3.493781
13 2016-08-07 13:36:59 Line 8281 air quality data 三重 / PM2.5 at 2015/9/7 9 o'clock filled whth 3.499112
14 2016-08-07 13:36:59 Line 8281 air quality data 三重 / PM2.5 at 2015/9/7 10 o'clock filled whth 2.499873
15 2016-08-07 13:36:59 Line 8281 air quality data 三重 / PM2.5 at 2015/9/7 11 o'clock filled whth 2.357125
16 2016-08-07 13:36:59 Line 8281 air quality data 三重 / PM2.5 at 2015/9/7 12 o'clock filled whth 1.193875
17 2016-08-07 13:36:59 Line 8281 air quality data 三重 / PM2.5 at 2015/9/7 13 o'clock filled whth 1.027696
18 2016-08-07 13:36:59 Line 8281 air quality data 三重 / PM2.5 at 2015/9/7 14 o'clock filled whth 1.003957
19 2016-08-07 13:36:59 Line 8281 air quality data 三重 / PM2.5 at 2015/9/7 15 o'clock filled whth 1.143422
20 2016-08-07 13:36:59 Line 8281 air quality data 三重 / PM2.5 at 2015/9/7 16 o'clock filled whth 1.306203
21 2016-08-07 13:36:59 Line 8281 air quality data 三重 / PM2.5 at 2015/9/7 17 o'clock filled whth 1.472315
22 2016-08-07 13:36:59 Line 8281 air quality data 三重 / PM2.5 at 2015/9/7 18 o'clock filled whth 1.353188
23 2016-08-07 13:36:59 Line 8281 air quality data 三重 / PM2.5 at 2015/9/7 19 o'clock filled whth 1.193313
24 2016-08-07 13:36:59 Line 8281 air quality data 三重 / PM2.5 at 2015/9/7 20 o'clock filled whth 1.027616
25 2016-08-07 13:36:59 Line 8281 air quality data 三重 / PM2.5 at 2015/9/7 21 o'clock filled whth 1.003945
26 2016-08-07 13:36:59 Line 8281 air quality data 三重 / PM2.5 at 2015/9/7 22 o'clock filled whth 1.000564
27 2016-08-07 13:36:59 Line 8281 air quality data 三重 / PM2.5 at 2015/9/7 23 o'clock filled whth 1.000113
28 2016-08-07 13:36:59 Line 8646 air quality data 三重 / PM10 at 2015/9/7 1 o'clock filled whth 1.500000
29 2016-08-07 13:36:59 Line 8646 air quality data 三重 / PM10 at 2015/9/7 2 o'clock filled whth 1.500000
30 2016-08-07 13:36:59 Line 8646 air quality data 三重 / PM10 at 2015/9/7 3 o'clock filled whth 1.357143
31 2016-08-07 13:36:59 Line 8646 air quality data 三重 / PM10 at 2015/9/7 4 o'clock filled whth 1.336735
32 2016-08-07 13:36:59 Line 8646 air quality data 三重 / PM10 at 2015/9/7 5 o'clock filled whth 1.333819
33 2016-08-07 13:36:59 Line 8646 air quality data 三重 / PM10 at 2015/9/7 6 o'clock filled whth 1.476260
34 2016-08-07 13:36:59 Line 8646 air quality data 三重 / PM10 at 2015/9/7 7 o'clock filled whth 1.496609
35 2016-08-07 13:36:59 Line 8646 air quality data 三重 / PM10 at 2015/9/7 8 o'clock filled whth 1.642373

Normal text file length: 3415176 lines: 31906 Ln: 1 Col: 1 Sel: 0|0 UNIX UTF-8 INS
```