WH001-read-data

October 5, 2019

[1]:
```
from os import listdir
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
```

[2]:
```
files = listdir('data')
print(files)
```

```
['017.TXT', '074.TXT', '041.TXT', '009.TXT', '014.TXT', '004.TXT', '046.TXT',
'099.TXT', '081.TXT', '065.TXT', '025.TXT', '072.TXT', '042.TXT', '066.TXT',
'024.TXT', '015 coughing after approx 90s.TXT', '028.TXT', '069.TXT', '090.TXT',
'036.TXT', '084.TXT', '022.TXT', '052.TXT', '047.TXT']
```

[3]:
```
with open('data/'+files[0]) as f:
    first_line = f.readline()
    print(first_line)
```

```
-0.210  -0.111  7.010   21.260  10.071  23.000  0.000   0.992
```

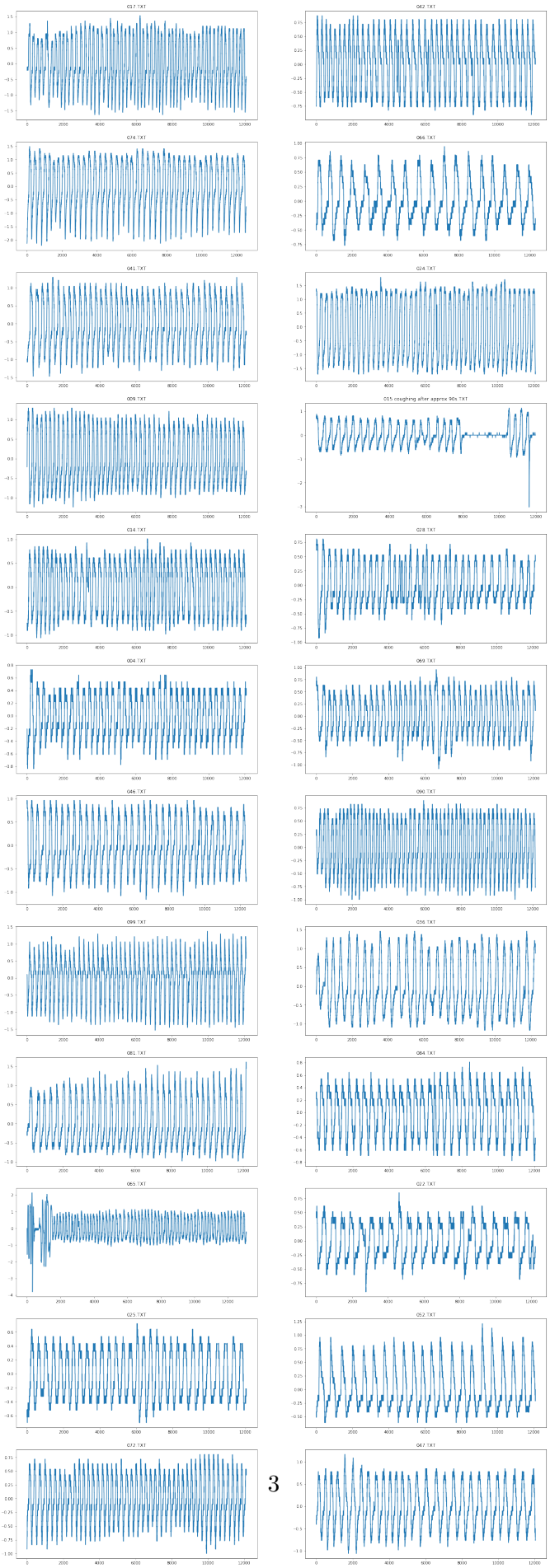
[4]:
```
data = np.genfromtxt('data/'+files[0], delimiter='\t')
```

[5]:
```
data[0]
```

[5]:
```
array([-0.21 , -0.111,  7.01 , 21.26 , 10.071, 23.   ,  0.   ,  0.992])
```

[25]:
```
fig, axs = plt.subplots(len(files)//2,2,figsize=(24, len(files)//2 * 6))
p=0
for i in range (2):
    for j in range(len(files)//2):
        if p < len(files):
            data = np.genfromtxt('data/'+files[p], delimiter='\t')
            print(files[p],data.shape)
            axs[j,i].plot(data[:,0])
            axs[j,i].set_title(files[p])
            p+=1
```

017.TXT (12069, 8)
074.TXT (12549, 8)
041.TXT (12090, 8)
009.TXT (12092, 8)
014.TXT (12079, 8)
004.TXT (12076, 8)
046.TXT (12336, 8)
099.TXT (12114, 8)
081.TXT (12168, 8)
065.TXT (13092, 8)
025.TXT (12049, 8)
072.TXT (12107, 8)
042.TXT (12075, 8)
066.TXT (12301, 8)
024.TXT (12082, 8)
015 coughing after approx 90s.TXT (11971, 8)
028.TXT (12155, 8)
069.TXT (12111, 8)
090.TXT (12143, 8)
036.TXT (12261, 8)
084.TXT (12060, 8)
022.TXT (12219, 8)
052.TXT (12099, 8)
047.TXT (12042, 8)


017.TXT
042.TXT
074.TXT
066.TXT
041.TXT
024.TXT
009.TXT
015 coughing after approx 90s.TXT
014.TXT
028.TXT
004.TXT
069.TXT
046.TXT
090.TXT
099.TXT
036.TXT
081.TXT
084.TXT
065.TXT
022.TXT
025.TXT
052.TXT
072.TXT
047.TXT

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