

pop1

July 30, 2021

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[1]: import csv
import matplotlib.pyplot as plt
import numpy as np
```

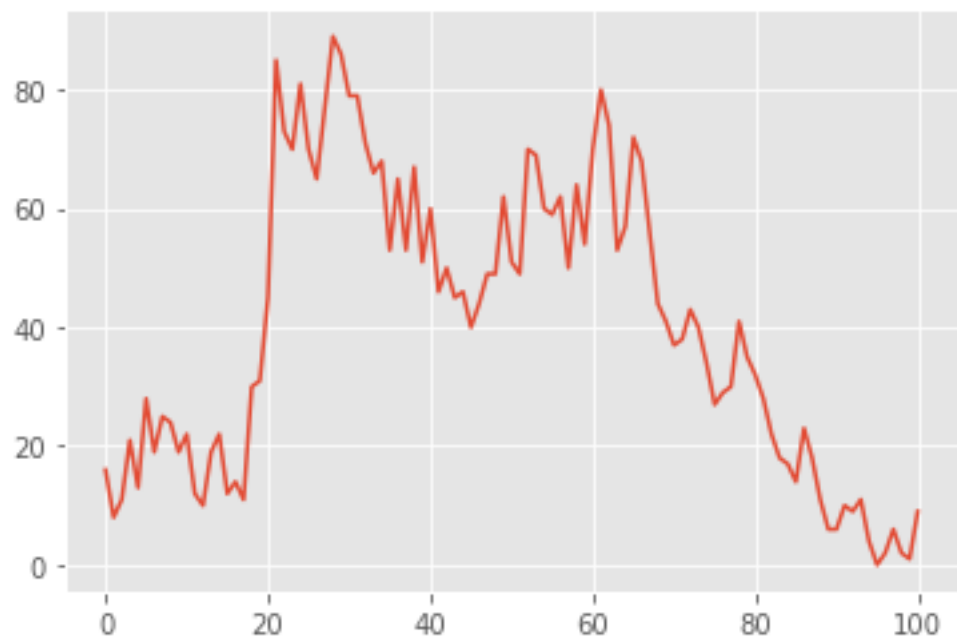
```
[9]: data: [] = list()
data = csv.reader(open('data/202106_202106_ _ .csv', 'rt', encoding='UTF-8'))
```

```
[10]: arr = []
[arr.append(int(j)) for i in data if ' ' in i[0] for j in i[3:]]
print([i for i in arr])
```

```
[16, 8, 11, 21, 13, 28, 19, 25, 24, 19, 22, 12, 10, 19, 22, 12, 14, 11, 30, 31,
45, 85, 73, 70, 81, 70, 65, 77, 89, 86, 79, 79, 71, 66, 68, 53, 65, 53, 67, 51,
60, 46, 50, 45, 46, 40, 44, 49, 49, 62, 51, 49, 70, 69, 60, 59, 62, 50, 64, 54,
70, 80, 74, 53, 57, 72, 68, 56, 44, 41, 37, 38, 43, 40, 34, 27, 29, 30, 41, 35,
32, 28, 22, 18, 17, 14, 23, 18, 11, 6, 6, 10, 9, 11, 4, 0, 2, 6, 2, 1, 9]
```

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[11]: plt.style.use('ggplot')
plt.plot(arr)
```

```
[11]: [<matplotlib.lines.Line2D at 0x7fc3863860a0>]
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