# changed_temperature_on_my_birthday

July 30, 2021

[73]:
```python
'''
next()          .
function      header     .
consumer       data    header      .

row[ , ,  (℃),  (℃),  (℃)]     -1  .
data : [] = list() list    data   list()        .
 ,                .         .
data : [] = None
def save_highest_temperature(self):
    data = list()
 ,             .
data : [] =list()
'''
```

[73]:
```
'\nnext()          .\nfunction      header      .\nconsumer
data    header      .\n\nrow[ , ,  (℃),  (℃),  (℃)]     -1  . \ndata
: [] = list() list    data   list()          .\n ,
      .          .\ndata : [] = None\ndef save_highest_temperature(self):\n
data = list()\n ,                    .\ndata : [] =list()\n'
```

[96]:
```python
import csv
import matplotlib.pyplot as plt
import random
```

[97]:
```python
data = csv.reader(open('data/seoul.csv', 'rt', encoding='UTF-8'))
```

[98]:
```python
next(data)
```

[98]:
```
[' ', ' ', '  (℃)', '  (℃)', '  (℃)']
```

[99]:
```python
ls = list(data)
```

[114]:
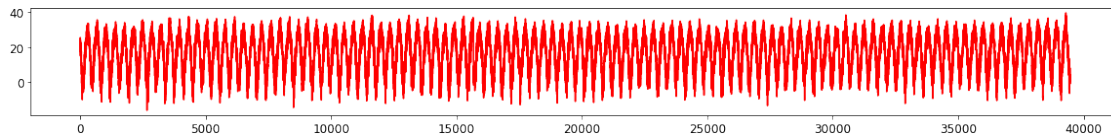```python
#print([i for i in ls])
```

[115]:
```python
#print([i[-1] for i in ls]) # show_highest_temperature
```

1

```
[102]: highest_temperature = []
       [highest_temperature.append(float(i[-1])) for i in ls if i[-1] != '']
       print(f' {len(highest_temperature)} ')
```

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```
[103]: plt.figure(figsize=(20, 2))
       plt.plot(highest_temperature, 'r')
```

[103]: [<matplotlib.lines.Line2D at 0x7fd178aa5160>]
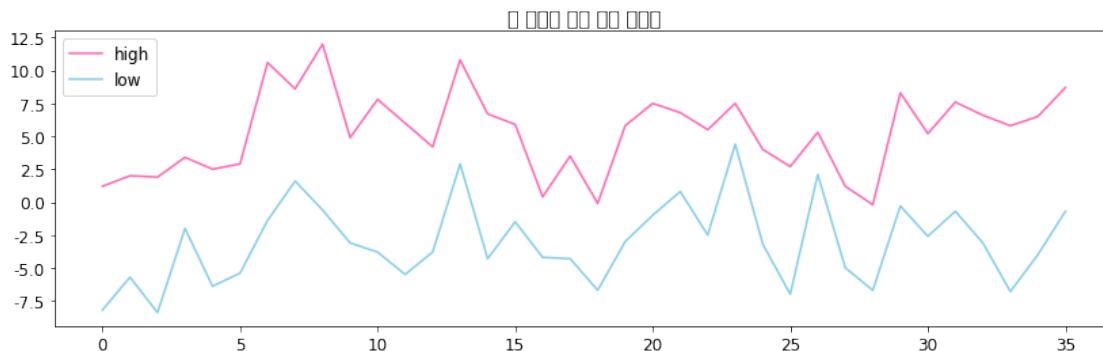


```
[104]: high = [] #
       low = [] #
```
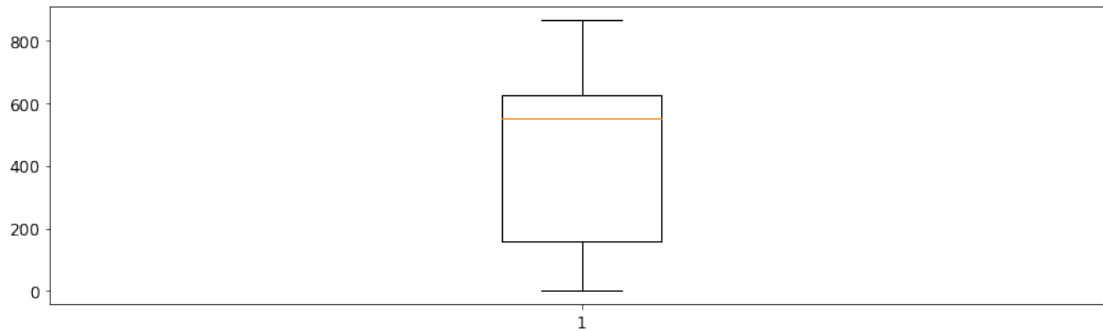
```
[105]: for i in ls:
           if i[-1] != '' and i[-2] != '':
               if 1983 <= int(i[0].split('-')[0]):
                   if i[0].split('-')[1] == '02' and i[0].split('-')[2] == '14':
                       high.append(float(i[-1]))
                       low.append(float(i[-2]))
```

```
[106]: plt.rc('font')
       plt.rcParams['axes.unicode_minus'] = False
       plt.title('          ')
       plt.plot(high, 'hotpink', label='high')
       plt.plot(low, 'skyblue', label='low')
       plt.legend()
```

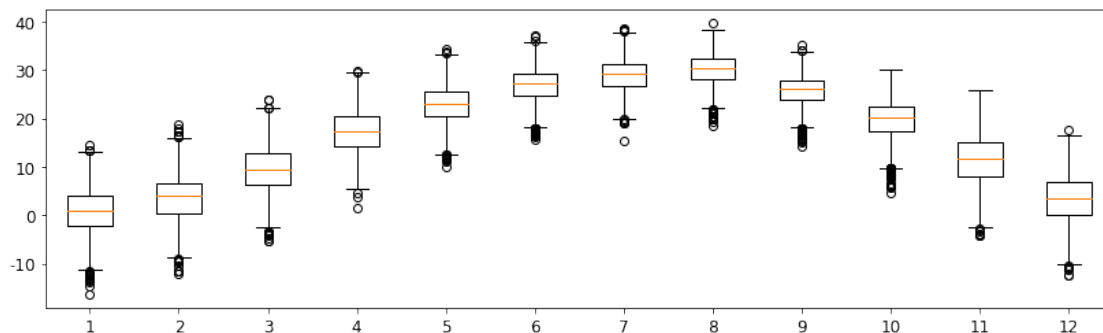[106]: <matplotlib.legend.Legend at 0x7fd17b249e50>

```
[107]: arr = []
       [arr.append(random.randint(1, 1000))for i in range(13)]
       plt.boxplot(arr)
       plt.show()
```
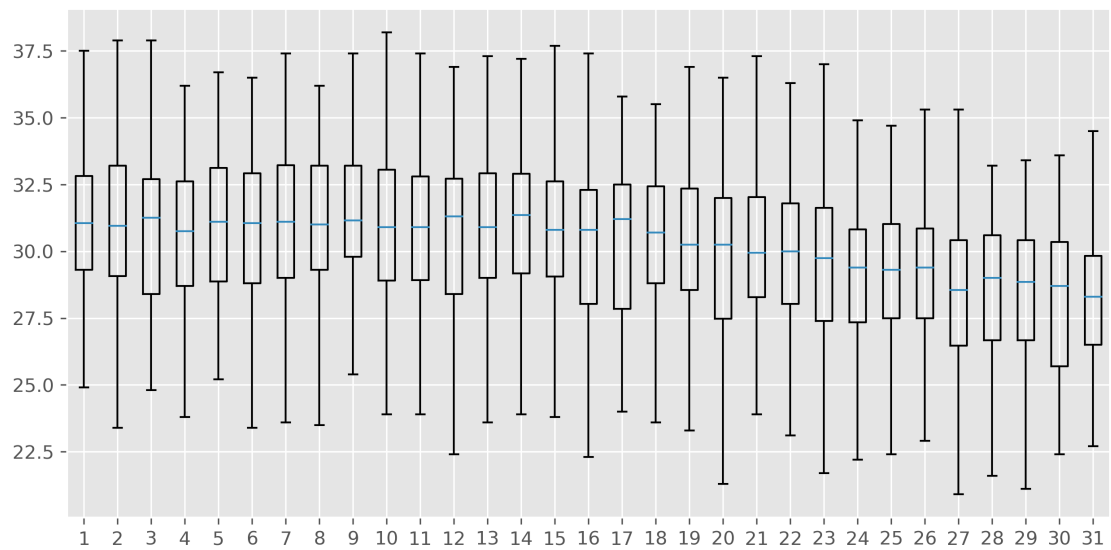


```
[110]: month = [[], [], [], [], [], [], [], [], [], [], [], []]
       [month[int(i[0].split('-')[1]) - 1].append(float(i[-1])) for i in ls if i[-1] !
       ↳= '']
       plt.boxplot(month)
       plt.show()
```



```
[113]: day = []
       [day.append([]) for i in range(31)]
       [day[int(i[0].split('-')[2]) -1].append(float(i[-1]))
            for i in ls
                if i[-1] != ''
                    if i[0].split('-')[1] == '08']
       plt.style.use('ggplot') # Graph Style
       plt.figure(figsize=(10, 5), dpi=300) # Graph Size
```

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```python
plt.boxplot(day, showfliers=False) # Omit Outlier
plt.show()
```



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