changed_temperatures_on_my_birthday

July 30, 2021

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

row[ , ,  (℃),  (℃),  (℃)]     -1

data : [] = list()  list    data   list()          .
,                  .       .
data : [] = None
def save_highest_temperatures(self):
     data = list()
  ,                .       .
data : [] = list()
'''
```

[109]:
```
import csv
import matplotlib.pyplot as plt
import random
```

[110]:
```
data = csv.reader(open('./data/unit_5_seoul.csv', encoding='cp949'))
```

[111]:
```
  next(data)
```

[111]:
```
[' ', ' ', '  (℃)', '  (℃)', '  (℃)']
```

[112]:
```
ls = list(data)
```

[113]:
```
# print([i for i in ls])  #show_highest_temperature
```

[114]:
```
highest_temperatures = []
[highest_temperatures.append(float(i[-1])) for i in ls if i[-1] != '']
print(f' {len(highest_temperatures)} ')
```

```
 39463
```

[115]:
```
plt.plot(highest_temperatures, 'lightpink')
plt.figure(figsize=(20,2))
plt.show()
```

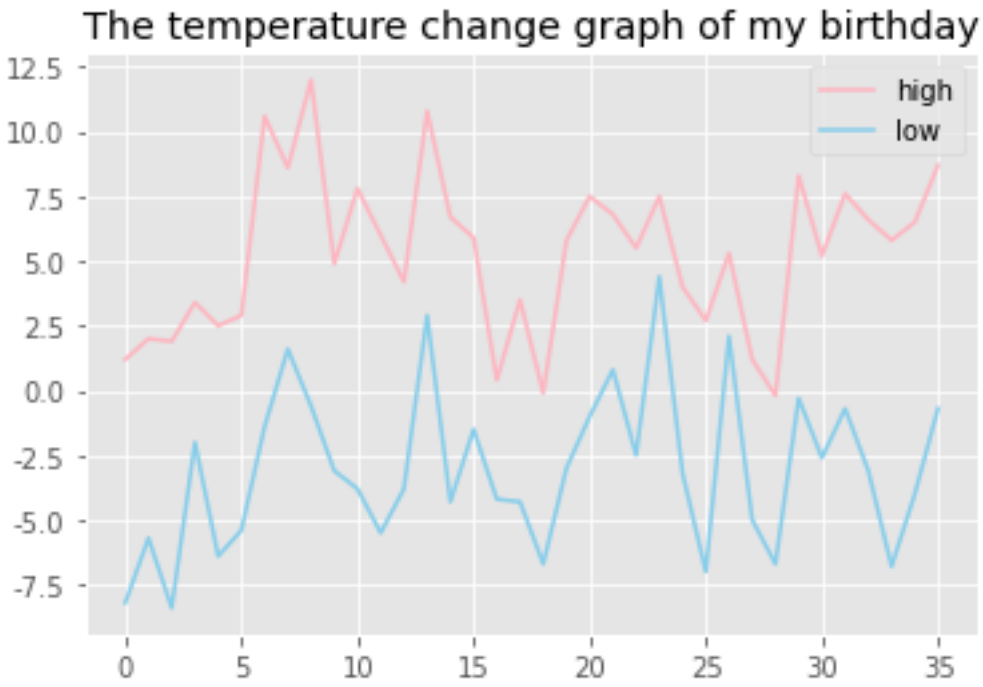

```
<Figure size 1440x144 with 0 Axes>
```

[116]:
```
high = []  #
low = []   #
```

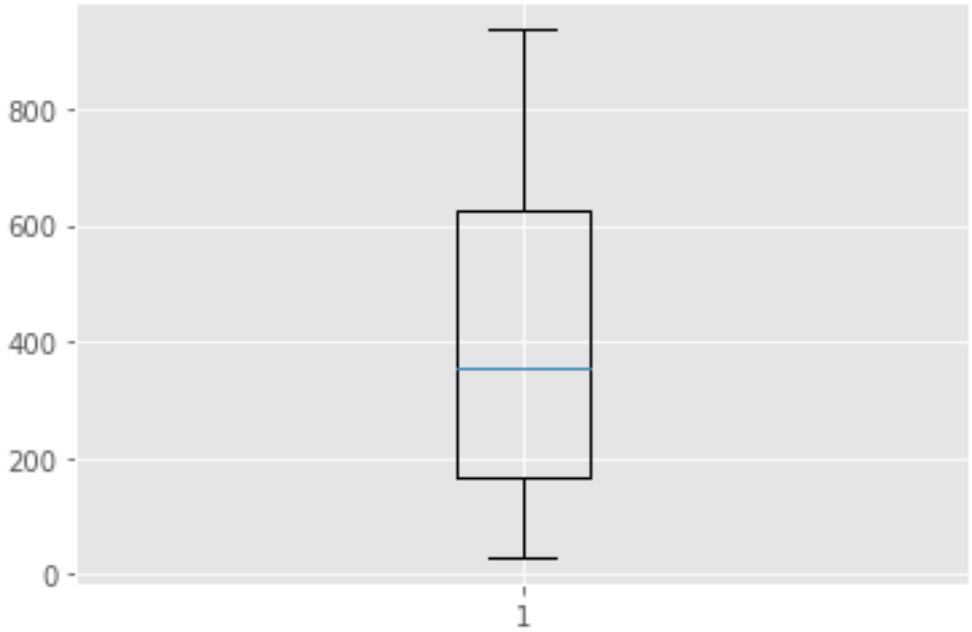
[117]:
```
for i in ls:
            if i[-1] != '' and i[-2] !='':
                if 1983 <= int(i[0].split('-')[0]):
                    if i[0].split('-')[1] == '02' and i[0].split('-')[2] ==␣
↪'14':
                        high.append(float(i[-1]))
                        low.append(float(i[-2]))
```

[118]:
```
plt.rc('font', family='Malgun Gothic')
plt.rcParams['axes.unicode_minus'] = False
plt.title('The temperature change graph of my birthday')
plt.plot(high, 'lightpink', label='high')
plt.plot(low, 'skyblue', label='low')
plt.legend()
plt.show()
```

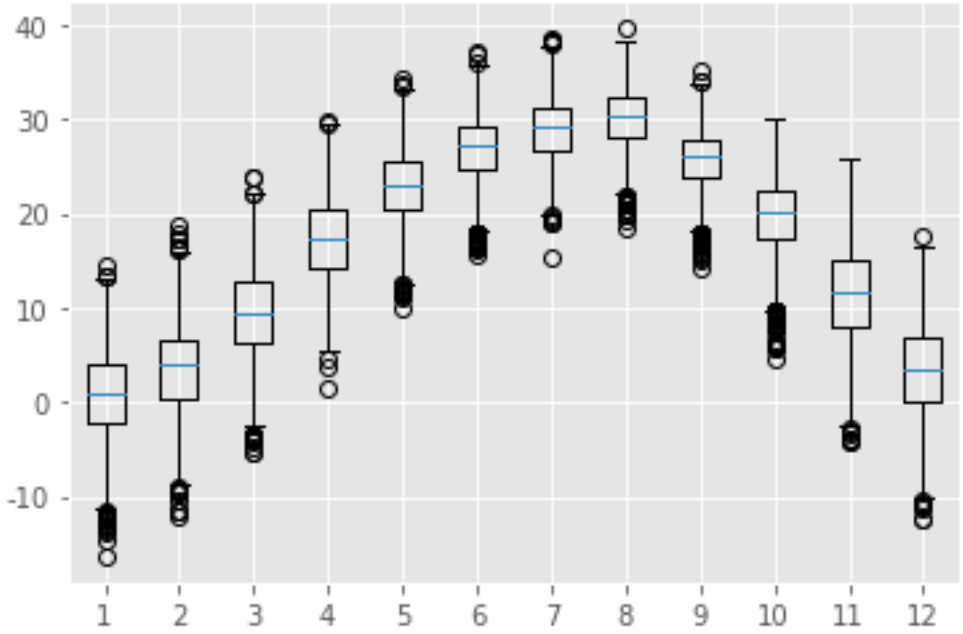
```
findfont: Font family ['Malgun Gothic'] not found. Falling back to DejaVu Sans.
```



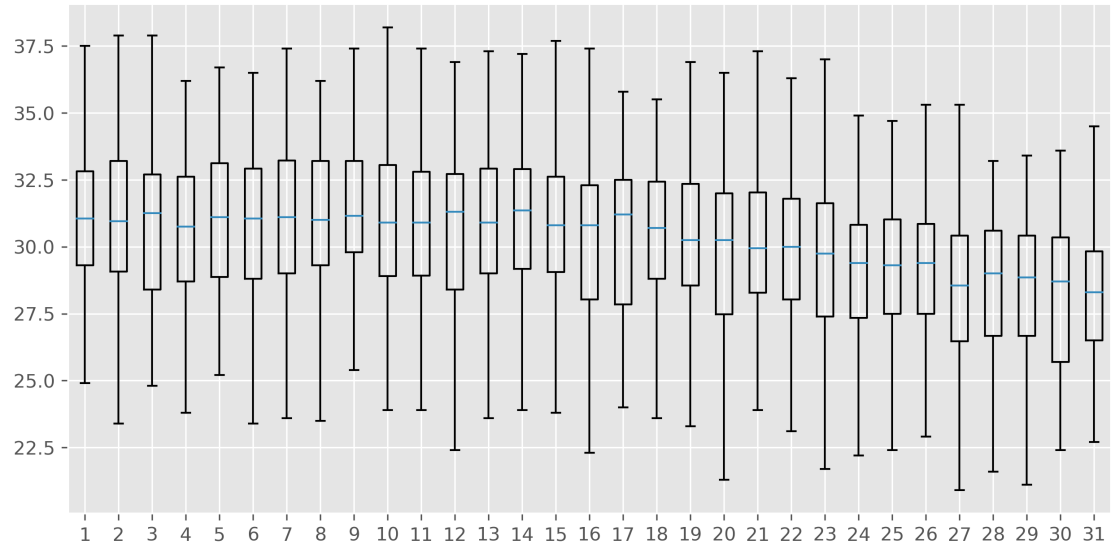
[119]:
```
arr = []
[arr.append(random.randint(1, 1000))for i in range(13)]
plt.boxplot(arr)
plt.show()
```



[120]:
```
month = [[], [], [], [], [], [], [], [], [], [], [], []]
# for i in arr:
#     if i[-1] != '':
#         month[int(i[0].split('-')[1])-1].append(float(i[-1]))
[month[int(i[0].split('-')[1]) - 1].append(float(i[-1])) for i in ls if i[-1] !
 ↪= '']
plt.boxplot(month)
plt.show()
```



[122]:
```
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
plt.boxplot(day, showfliers=False) # Omit Outlier
plt.show()
```


37.5
35.0
32.5
30.0
27.5
25.0
22.5
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

[ ]: