# changed_temperatures_on_my_birthday

July 30, 2021

[45]:
```
import csv
import matplotlib.pyplot as plt
```

[46]:
```
data = csv.reader(open('data/seoul.csv', 'r', encoding='UTF-8'))
```

[47]:
```
next(data)
```

[47]:
```
[' ', ' ', '  (℃)', '  (℃)', '  (℃)']
```

[48]:
```
ls = list(data)
```

[49]:
```
'''
next()           .
function       header     .
consumer       data  header     .
row[ , ,  (℃),  (℃),  (℃)]     -1  .
data : [] = list()  list   data  list()          .
,                  .       .
data : [] = None
def save_highest_temperatures(self):
     data = list()
 ,                 .       .
data : [] = list()
'''
```

[49]:
```
'\nnext()           .\nfunction       header     .\nconsumer
data  header     .\nrow[ , ,  (℃),  (℃),  (℃)]     -1  .\ndata :
[] = list()  list   data  list()          .\n ,
   .       . \ndata : [] = None\ndef save_highest_temperatures(self):\n
data = list()\n  ,                .       . \ndata : [] =
list()\n'
```

[102]:
```
# print([i for i in ls])
```

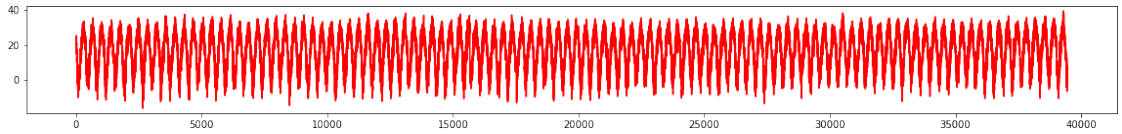
[104]:
```
# print([i[-1] for i in ls])
```

[60]:
```
highest_temperatures = []
[highest_temperatures.append(float(i[-1])) for i in ls if i[-1] != '']
print(f' {len(highest_temperatures)} ')
```

```
 39463
```

[62]:
```
plt.figure(figsize=(20,2))
plt.plot(highest_temperatures, 'r') # red
```

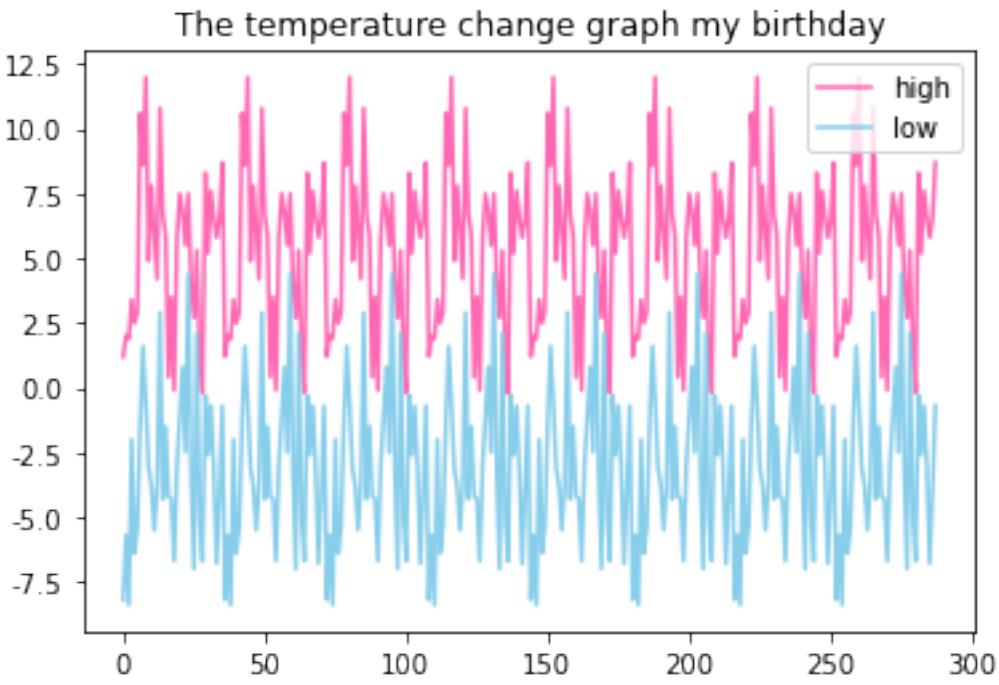
[62]:
```
[<matplotlib.lines.Line2D at 0x7f6b56999ac0>]
```




[63]:
```
high = [] #
low = [] #
```

[92]:
```
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]))
plt.rc('font', family='Malgun Gothic')
plt.rcParams['axes.unicode_minus'] = False
plt.title('The temperature change graph my birthday')
plt.plot(high, 'hotpink', label='high')
plt.plot(low, 'skyblue', label='low')
plt.legend()
```

[92]:
```
<matplotlib.legend.Legend at 0x7f6ba16ed130>
```


The temperature change graph my birthday
high
low
12.5
10.0
7.5
5.0
2.5
0.0
-2.5
-5.0
-7.5
0
50
100
150
200
250
300