changed_temperature_on_my_birthday

July 30, 2021

[68]:
```
import csv
import matplotlib.pyplot as plt
```

[69]:
```
data = csv.reader(open('data/seoul.csv', 'rt', encoding='UTF-8'))
```

[70]:
```
next(data)
```

[70]:
```
[' ', ' ', '  (℃)', '  (℃)', '  (℃)']
```

[71]:
```
ls = list(data)
```

[81]:
```
# print([i for i in ls])
```

[73]:
```
'''
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'
```

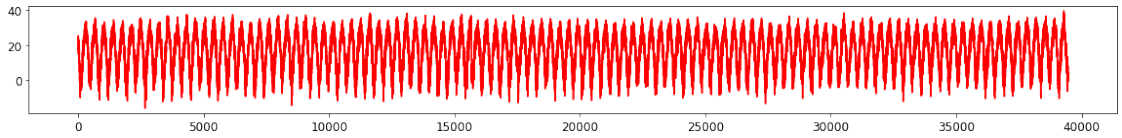
[82]:
```
# print([i[-1] for i in ls]) # show_highest_temperature
```

[75]:
```
highest_temperature = []
[highest_temperature.append(float(i[-1])) for i in ls if i[-1] != '']
print(f' {len(highest_temperature)} ')
```

```
 39463
```

[76]:
```
plt.figure(figsize=(20, 2))
plt.plot(highest_temperature, 'r')
```

[76]: [<matplotlib.lines.Line2D at 0x7fd17b5ca6d0>]

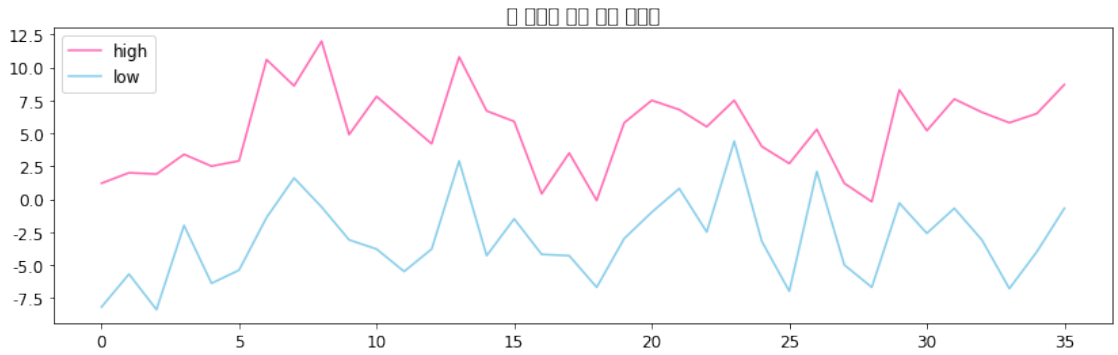


[77]:
```
high = [] #
low = [] #
```

[78]:
```
        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]))
```

[80]:
```
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()
```

[80]: <matplotlib.legend.Legend at 0x7fd1791aa4c0>


□ □□□ □□ □□ □□□
high
low
12.5
10.0
7.5
5.0
2.5
0.0
-2.5
-5.0
-7.5
0
5
10
15
20
25
30
35