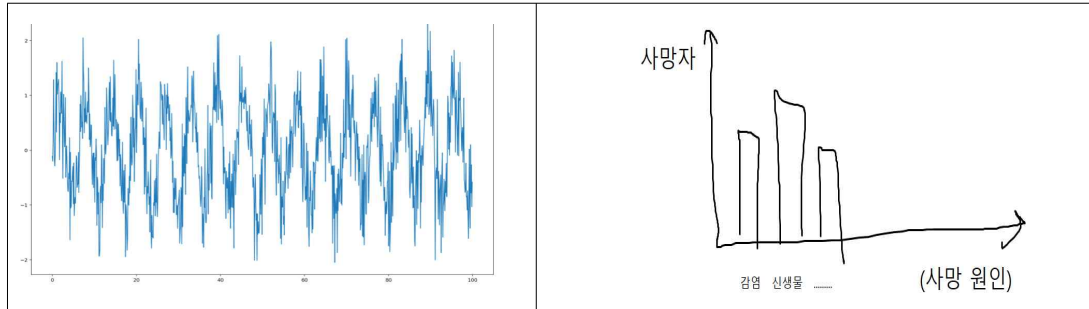


| 항목 번호      | 기능 정의항목  |
|------------|--|
| 1          | . (requests 패키지를 사용하여) openweathermap에서 자료를 요청하여 날씨정보(JSON)를 얻어옴 |
| 2          | . 날씨정보에서 날씨정보를 획득함   |
| 3          | . 주기적으로 얻은 날씨정보를 CSV 형식으로 저장함                                    |
| 4          | . CSV 저장된 날씨정보를 사용하여 주가 변화에 대한 통계처리를 수행함                         |
| 5          | . 저장된 CSV 파일을 읽어 나만의 그래프로 시각화 함                                  |
| 주요<br>고려사항 |  |

### 3. 예상 결과

CSV 에 저장된 최종결과는 날씨변화를 그래프로 시각화한다. 예상 결과는 자유롭게 손으로 그려서 제출한다.



#### \* 참고자료

- 기능정의 1,2를 위한 python 코드

```
def search_city(city):

    API_KEY = 'a070fcd8fc2db8d5d1f140466a2012b4' # initialize your key here
    # call API and convert response into Python dictionary

    url = f'http://api.openweathermap.org/data/2.5/weather?q={city}&APPID={API_KEY}'
    response = requests.get(url).json()

    # error like unknown city name, invalid api key
    if response.get('cod') != 200:
        message = response.get('message', '')
        return f'Error getting temperature for {city.title()}. Error message = {message}'


    # get current temperature and convert it into Celsius
    current_temperature = response.get('main', {}).get('temp')
    if current_temperature:
        current_temperature_celsius = round(current_temperature - 273.15, 2)
        return f'Current temperature of {city.title()} is {current_temperature_celsius}'
    else:
        return f'Error getting temperature for {city.title()}'

result = search_city('London')
print (result)

Current temperature of London is 8.65
```

## 템프로젝트 계획서

- openweathermap.org의 API 관련 정보

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### Current & Forecast weather data collection

| Current weather data  | Hourly forecast  | One Call API <sup>NEW</sup>  |
|---|--|--|
| <a href="#">API doc</a> <a href="#">Subscribe</a>   | <a href="#">API doc</a> <a href="#">Subscribe</a>  | <a href="#">API doc</a> <a href="#">Subscribe</a>  |
| <ul style="list-style-type: none"><li>• Access current weather data for any location including over 200,000 cities</li><li>• Current weather is frequently updated based on global models and data from</li></ul> | <ul style="list-style-type: none"><li>• Hourly forecast is available for 4 days</li><li>• Forecast weather data for 96 timestamps</li><li>• Higher geographic accuracy</li></ul> | <ul style="list-style-type: none"><li>• Make one API call and get current and forecast weather data</li><li>• Hourly forecast for 48 hours</li><li>• Daily forecast for 7 days</li></ul> |