

# Markdown 연습해보기

## -실습-

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컴퓨터시공학부  
천세진

# Markdown이란?

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- 구조화된 콘텐츠 작성을 위한 아주 쉬운 방법 중의 하나
- #, \*, \_ 등을 사용하여 Markdown-포맷 파일을 렌더링함
- 수학적 작성이 매우 용이함
- Github, Python Jupyter Notebook, Jekyll Blog

# Markdown의 장점

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- Highly portable
- Future-proof
- Semantic structure is accessible and machine-readable
- Multiple Markdown editing options
  - from plain texts to dedicated visual editors
- Editable on any device and platform
- Minimal and writing-focused



## # 05 - Notes

### ## Syntax

Notes are written in [GitHub-Flavored Markdown] (<https://guides.github.com/features/mastering-markdown>), so you can write emojis (``:joy:` -> :joy:`), ~~strikethrough~~ text etc. in a familiar fashion, additionally you can also write subscripts<sub>example</sub>, superscripts<sup>example</sup> and footnotes<sup>[1]</sup>.

<sup>[1]</sup>: This is a footnote, you don't need to manually write it at the bottom of the document.

This also means that your notes aren't locked into any proprietary format.

Notes can have some metadata: if they are favorited or not, which tags they have, wh

## 05 - Notes

### Syntax

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This also means that your notes aren't locked into any proprietary format.

Notes can have some metadata: if they are favorited or not, which tags they have, which attachments they have, etc. These metadata are written as Markdown front matter. This is taken care of for you.

Github

by Dlugine

```
example.Rmd *
1 # Header 1
2
3 This is an R Markdown document. Markdown is a
4 simple formatting syntax for authoring webpages.
5
6 Use an asterisk mark to provide emphasis, such
7 as italics or bold.
8
9 Create lists with a dash:
10
11 - Item 1
12 - Item 2
13 - Item 3
14
15 Use back ticks to
16 create a block of code
17
18 Embed LaTeX or MathML equations,
19  $\frac{1}{n} \sum_{i=1}^n x_i$ 
20
21 Or even footnotes, citations, and a
22 bibliography. [^1]
23
24 [^1]: Markdown is great.
25
1:1 # Header 1
```

example.html | Open in Browser | Find

# Header 1

This is an R Markdown document. Markdown is a simple formatting syntax for authoring web pages.

Use an asterisk mark to provide emphasis, such as *italics* or **bold**.

Create lists with a dash:

- Item 1
- Item 2
- Item 3

Use back ticks to create a block of code

Embed LaTeX or MathML equations,  $\frac{1}{n} \sum_{i=1}^n x_i$

Or even footnotes, citations, and a bibliography. <sup>1</sup>

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1. Markdown is great. ↩

## Simple spectral analysis

An illustration of the [Discrete Fourier Transform](#) using windowing, to reveal the frequency content of a sound signal.

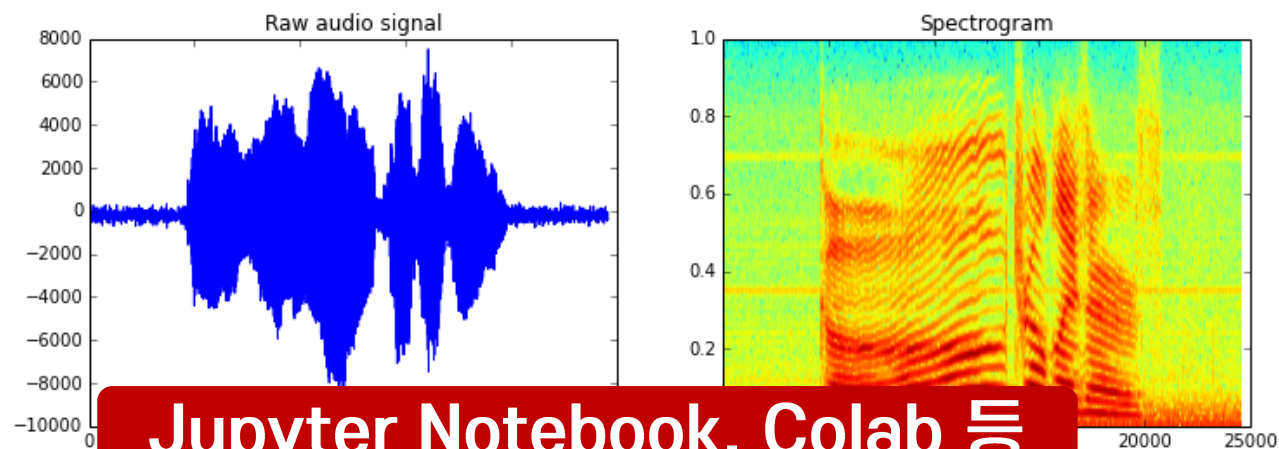
$$X_k = \sum_{n=0}^{N-1} x_n e^{-\frac{2\pi i}{N} kn} \quad k = 0, \dots, N-1$$

We begin by loading a datafile using SciPy's audio file support:

```
In [1]: from scipy.io import wavfile
rate, x = wavfile.read('test_mono.wav')
```

And we can easily view its spectral structure using matplotlib's builtin spectrogram routine:

```
In [2]: %matplotlib inline
from matplotlib import pyplot as plt
fig, (ax1, ax2) = plt.subplots(1, 2, figsize=(12, 4))
ax1.plot(x); ax1.set_title('Raw audio signal')
ax2.spectrogram(x); ax2.set_title('Spectrogram');
```



Jupyter Notebook, Colab 등

Untitled 2 — Edited

## #Lorem ipsum

Lorem ipsum dolor sit amet, consectetur adipisicing elit, quis **\*\*nostrud exercitation\*\*** ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in **\*voluptate velit\***.

### ###Code

```
```javascript
var foo = 'bar';
if(true) foo = 'foo';
```
```

### ###Tables

| First Header                | Second Header                |
|-----------------------------|------------------------------|
| Content from cell 1         | Content from cell 2          |
| Content in the first column | Content in the second column |

## Lorem ipsum

Lorem ipsum dolor sit amet, consectetur adipisicing elit, quis **nostrud exercitation** ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in *voluptate velit*.

### Code

```
var foo = 'bar';
if(true) foo = 'foo';
```



### Tables

| First Header        | Second Header       |
|---------------------|---------------------|
| Content from cell 1 | Content from cell 2 |

# Jupyter Notebook Markdown Cheatsheet

From [SqlBak.com](https://www.sqlbak.com) with ❤️

|  |   |
|--|---|
| #uHeader 1<br>Header 1<br>=====                | <b>Header 1</b>   |
| ##uHeader 2<br>Header 2<br>-----               | <b>Header 2</b>   |
| ###uHeader 3                                   | <b>Header 3</b>   |
| ####uHeader 4                                  | <b>Header 4</b>   |
| #####uHeader 5                                 | <b>Header 5</b>   |
| <i>*italics*</i><br>_italics_                  | <i>italics</i>  |
| \*literal asterisks\*                          | <b>*literal asterisks*</b>  |
| <b>**bold**</b><br>__bold__                    | <b>bold</b>   |
| ~~strikethrough~~                              | <del>strikethrough</del>  |
| 1.uFirst item<br>2.uSecond item<br>u1.uSubitem | <ol style="list-style-type: none"> <li>1. First item</li> <li>2. Second item <ol style="list-style-type: none"> <li>A. Subitem</li> </ol> </li> </ol> |
| *uItem 1<br>uIndent<br>~uItem 2<br>u+uItem 3   | <ul style="list-style-type: none"> <li>• Item 1<br/>  Indent</li> <li>• Item 2 <ul style="list-style-type: none"> <li>■ Item 3</li> </ul> </li> </ul> |
| - [x] Done<br>- [ ] To do                      | <ul style="list-style-type: none"> <li>• <input checked="" type="checkbox"/> Done</li> <li>• <input type="checkbox"/> To do</li> </ul>                |
| A<br>Lineu<br>Break                            | <b>A Line Break</b>   |
| ---<br>* * *                                   | ---   |

| <code>&lt;a id="anchor"&gt;&lt;/a&gt;</code><br><code>[Go to anchor] (#anchor)</code><br><br><code>#uTop Header</code><br><code>[Go to header] (#Top-Header)</code>                            | <a href="#">Go to anchor</a>   |       |        |       |   |   |   |   |   |   |
|--|--|-------|--------|-------|---|---|---|---|---|---|
| <code>https://sqlbak.com</code><br><br><code>[Link] (https://sqlbak.com</code><br><code>"optional title")</code><br><br><code>Click [here] [id]</code><br><code>[id]:https://sqlbak.com</code> | <a href="#">Link</a>   |       |        |       |   |   |   |   |   |   |
| <code>&gt; blockquote text</code>  | <div>blockquote text</div>   |       |        |       |   |   |   |   |   |   |
| <code>```python</code><br><code>print('hello');</code><br><code>```</code><br><br><code>`inline_code();`</code>  | <pre>print('hello');</pre>   |       |        |       |   |   |   |   |   |   |
| <code> Left Center Right </code><br><code> :---- :---- :---- </code><br><code> 1 A C </code><br><code> 2 B D </code>   | <table><thead><tr><th>Left</th><th>Center</th><th>Right</th></tr></thead><tbody><tr><td>1</td><td>A</td><td>C</td></tr><tr><td>2</td><td>B</td><td>D</td></tr></tbody></table> | Left  | Center | Right | 1 | A | C | 2 | B | D |
| Left   | Center   | Right |        |       |   |   |   |   |   |   |
| 1  | A  | C     |        |       |   |   |   |   |   |   |
| 2  | B  | D     |        |       |   |   |   |   |   |   |
| <code>![alt text](logo.png "Title")</code><br><br><code>![] [id]</code><br><code>[id]:logo.png "Title"</code>  |   |       |        |       |   |   |   |   |   |   |
| <code>\$\$\sqrt{k}\$\$</code><br><code>Inline: \$\sqrt{k}\$</code>   | $\sqrt{k}$   |       |        |       |   |   |   |   |   |   |
| <code>[[[Img Alt</code><br><code>Text] (http://img.youtube.com/vi/</code><br><code>aZCXow707nc/0.jpg)] (https://yout</code><br><code>u.be/aZCXow707nc "Video Title")</code>                    |   |       |        |       |   |   |   |   |   |   |



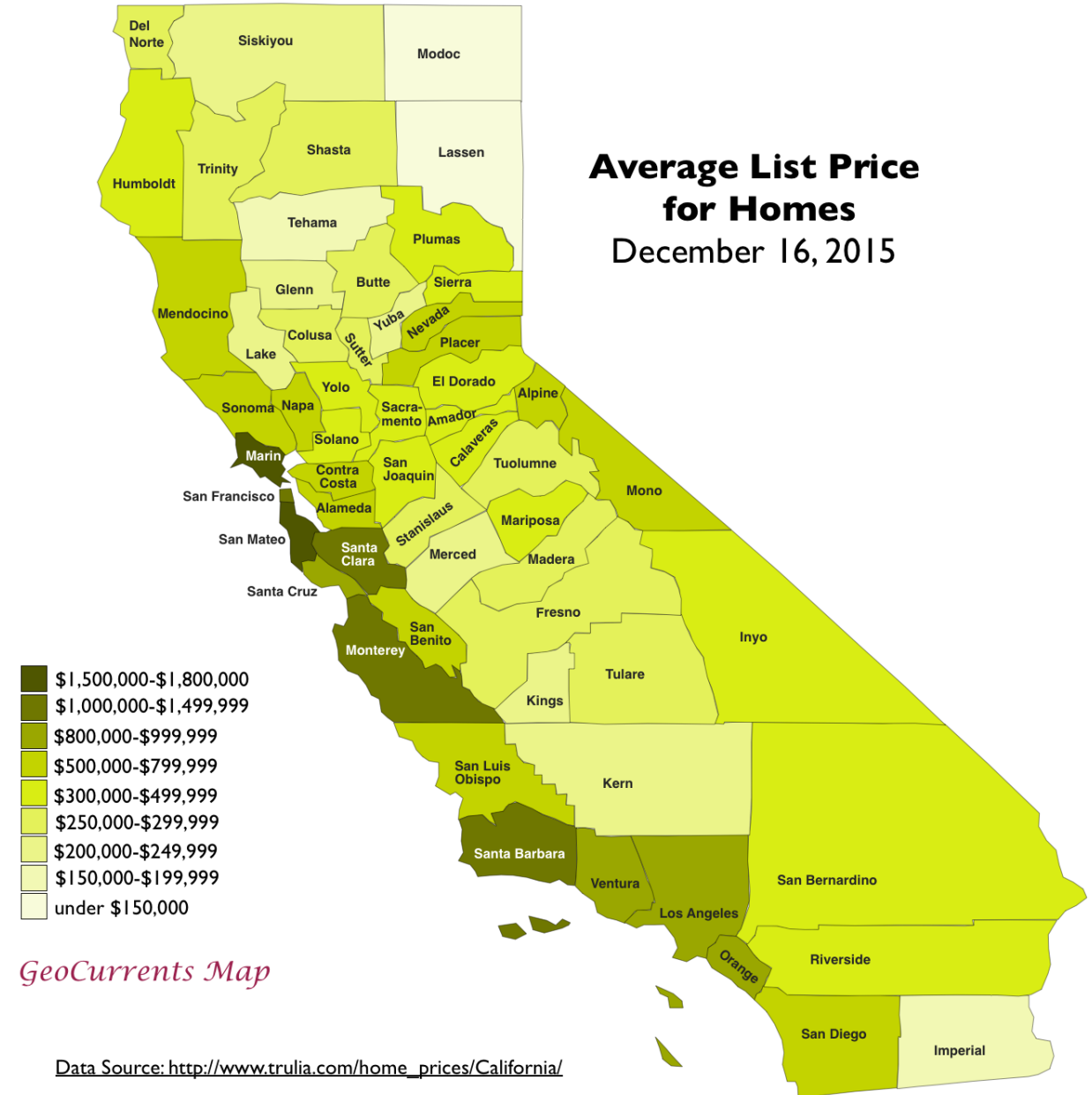
# Markdown: 고령친화도시 부산

---

- <http://afc.bswdi.re.kr/Main.do>
- <https://data.busan.go.kr/customData/list.nm?apitype=130>
- Github 저장소 생성: age-friendly-busan
  - 고령친화 도시 소개
  - 고령친화 조성의 필요성
  - 부산시 어르신 맞춤형 데이터
    - 데이터 링크

# 10분만에 끝내는 데이터 분석 체험

## ■ 캘리포니아 집값 데이터 알아보기



```
[1] import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns

[2] train = pd.read_csv('/content/sample_data/california_housing_test.csv')
test = pd.read_csv('/content/sample_data/california_housing_train.csv')
train.head()

[3] test.head()

[4] train.describe()


[5] train.hist(figsize=(15,13) , grid=False , bins=50 )
plt.show()

[6] correlation = train.corr()


[7] plt.figure(figsize=(10,10))
sns.heatmap(correlation , annot=True)
plt.show()
```

# Github 으로 커밋

## GitHub으로 복사

저장소: 

sejin-chun/oss ▼

브랜치: 

main ▼

파일 경로

test.ipynb

변경사항 설명 메시지

Colaboratory를 통해 생성됨

☒ Colaboratory 링크 추가

취소

확인



# 커밋된 내용 확인



sejin-chun Colaboratory를 통해 생성됨

Latest commit 04149be now [History](#)

1 contributor

810 lines (810 sloc) | 151 KB

[<>](#) [File](#) [Raw](#) [Blame](#) [View](#) [Copy](#) [Edit](#) [Delete](#)

[Open in Colab](#)

```
In [1]: import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
```

```
In [2]: train = pd.read_csv('/content/sample_data/california_housing_test.csv')
test = pd.read_csv('/content/sample_data/california_housing_train.csv')
train.head()
```

```
Out[2]:
```

|   | longitude | latitude | housing_median_age | total_rooms | total_bedrooms | population | households | median_income | median_house_value |
|---|-----------|----------|--------------------|-------------|----------------|------------|------------|---------------|--------------------|
| 0 | -122.05   | 37.37    | 27.0               | 3885.0      | 661.0          | 1537.0     | 606.0      | 6.6085        | 344700.0           |
| 1 | -118.30   | 34.26    | 43.0               | 1510.0      | 310.0          | 809.0      | 277.0      | 3.5990        | 176500.0           |
| 2 | -117.81   | 33.78    | 27.0               | 3589.0      | 507.0          | 1484.0     | 495.0      | 5.7934        | 270500.0           |
| 3 | -118.36   | 33.82    | 28.0               | 67.0        | 15.0           | 49.0       | 11.0       | 6.1359        | 330000.0           |
| 4 | -119.67   | 36.33    | 19.0               | 1241.0      | 244.0          | 850.0      | 237.0      | 2.9375        | 81700.0            |



# Markdown을 이용해서 문서 작성

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## ■ Markdown을 이용해서 문서 작성

- 다양한 종류의 헤딩 설계
- 캘리포니아 위키링크 삽입
- 캘리포니아 요약 소개: Italic, Bold 체 사용
- 캘리포니아 관광명소: 글머리 기호
- 유튜브 아이콘 및 Hotel California 뮤직비디오 링크 삽입

[https://www.youtube.com/img/desktop/yt\\_1200.png](https://www.youtube.com/img/desktop/yt_1200.png)

<https://www.youtube.com/watch?reload=9&v=BciS5krYL80>

# STEP-UP

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# Italic and Bold

---

- markdown을 사용하여 다음 문장과 같이 표현되도록 작성하시오
- 마크다운 *이탤릭* 어렵지 않아요!
- 진정한 개발자는 깃허브를 일기처럼 씁니다



# Headers

---

- 헤더1
- 헤더2
- 헤더3
- 헤더4

# Link

---

- 문장에 다음 링크를 추가해봅시다..
- 동아대학교 홈페이지는 여기로
  - <https://www.donga.ac.kr>
- My github page is available here



# Image

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- 이미지 추가하기
- 동아대학교 로고를 추가하세요

# Blockquotes

---

## ■ 인용이나 특정 정보를 참고로 사용하고 싶을 때 (>)

1. “The computer was born to solve problems that did not exist before.” — Bill Gates, Microsoft founder and former CEO, philanthropist
2. “Most of the good programmers do programming not because they expect to get paid or get adulation by the public, but because it is fun to program.” — Linus Torvalds, software engineer, inventor of the Linux operating system
3. “Everybody should learn to program a computer, because it teaches you how to think.” - Steve Jobs, former CEO and creator of Apple



# Lists

---

## 1. 리스트(글머리 기호) 를 추가하기 위해 사용됩니다.

1. Ordered list (1, 2, 3)
2. Unordered list (\*)



# STEP UP

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## ■ 기본 실습

- 다양한 크기의 제목 작성
- 굵게, 기울임, 취소선을 활용한 텍스트 스타일
- 목록 작성 (순서가 있는 목록, 순서가 없는 목록)

## ■ 코드 블록 및 수식 활용

- 코드와 수식을 활용한 문서 작성
- 수식:  $E=mc^2$

## ■ 웹사이트 링크 혹은 이미지 활용

- 웹사이트 링크
- 이미지 활용