

# How to use Markdown Language to Author Lab Guides

Updated on Jul 3, 2025 • Published on Jan 19, 2025

⌚ 12 minute(s) read

c

## Overview

**Markdown** is a lightweight markup language for creating formatted text using a plain-text editor. It was created as a markup language that is easy to read in its source code form. Today, Markdown is widely used for blogging and instant messaging, and also used elsewhere in online forums, collaborative software, documentation pages, and readme files.

In CloudLabs, Markdown is used to create lab guides which will be rendered in the users lab environment, referring which users can perform the lab steps.

In this document you will be going through with the below topics:

- [Why Use Markdown](#)
- [Markdown Elements](#)

## Why Use Markdown

- Markdown can be used for everything. People use it to create websites, documents, notes, books, presentations, email messages, and technical documentation.
- Markdown is portable. Files containing Markdown-formatted text can be opened using virtually any application. If you decide you don't like the Markdown application you're currently using, you can import your Markdown files into another Markdown application.
- Markdown is platform independent. You can create Markdown-formatted text on any device running any operating system.

- Markdown is future proof. Even if the application you're using stops working at some point in the future, you'll still be able to read your Markdown-formatted text using a text editing application.
- Markdown is everywhere. Websites like GitHub support Markdown, and lots of desktop and web-based applications support it.

## Markdown Elements

Markdown elements are the basic building blocks used to format and structure text in Markdown. Below are some of the important Markdown elements that you need to know before authoring a lab guide.

**1. Headings:** To create a heading, add hash sign (#) in front of a word or phrase. The number of hash signs you use should correspond to the heading level you want, and the minimum hash sign you can use is 1 for heading level 1 and the max is 6 for heading level 6.

For example, to create a heading level three, use three hash signs: **### My Header**.

Below table illustrates the various heading levels that can be created using Markdown:

SL No	Markdown
1	# Heading level 1
2	## Heading level 2
3	### Heading level 3
4	#### Heading level 4
5	##### Heading level 5
6	###### Heading level 6

**Note:**

Markdown applications don't agree on how to handle a missing space between the hash signs (#) and the heading name. For compatibility, always put a space between the hash signs and the heading name.

**Accepted: # Heading level 1** **Not Accepted: #Heading level 1**

You should also put blank lines before and after a heading for compatibility.

**Accepted: Try to put a blank line before...**

# Heading level 1

...and after a heading.

**Not Accepted:** Try to put a blank line before... # Heading level 1 ...and after a heading.

**2. Paragraphs:** To create paragraphs, use a blank line to separate one or more lines of text. For Example:

I really like using Markdown.

<Blank Line>

I think I'll use it to format all of my documents from now on.

**Note:** Paragraphs in Markdown documents cannot be indented with spaces or tabs. If you need to indent paragraphs, you should use the **Indent (Tab)** element, which will be covered in more detail later in this document.

**3. Line Breaks:** To create a line break or new line, end a line with two or more spaces, and then press Enter on Windows or Return on Mac to enter a new line. For Instance:

Line 1 with two spaces<Space1><Space2>

Line 2

**4. Bold:** To bold text, add two asterisks or underscores before and after a word or phrase. Additionally, you can bold the middle of a word by adding two asterisks without spaces around the letters. The following table shows different ways to make text bold:

SL No	Markdown	Rendered Output
1	I love **bold** text.	I love <b>bold</b> text.
2	I love __bold__ text.	I love <b>bold</b> text.
3	I love**bold**text.	I love <b>bold</b> text.

**Note:** Underscores must not be used to emphasize text between words.

**Accepted:** I love \_\_bold\_\_ text. **Not Accepted:** I love**bold**text.

**5. Italic:** To italicize text, add one asterisk or underscore before and after a word or phrase. Additionally, you can italicize the middle of a word by adding one asterisk without spaces around the letters. The table below represents ways to make text italicize:

SL No	Markdown	Rendered Output
1	I love *italic* text.	I love <i>italic</i> text.
2	I love _italic_ text.	I love <i>italic</i> text.
3	I love*italic*text.	I love <i>italic</i> text.

**Note:** Underscores must not be used to italicize text between words.

**Accepted:** I love \_\_italic\_\_ text. **Not Accepted:** I love*italic*text.

**6. Bold and Italic:** To emphasize text with bold and italics at the same time, add three asterisks or underscores before and after a word or phrase. Additionally, to bold and italicize the middle of a word, add three asterisks without spaces around the letters. The table below illustrates various ways to make text bold and italicized:

SL No	Markdown	Rendered Output
1	I love ***bold and italic*** text.	I love <b>bold and italic</b> text.
2	I love __bold and italic__ text.	I love <b>bold and italic</b> text.
3	I love***bold and italic***text.	I love <b>bold and italic</b> text.

**Note:** Underscores must not be used to italicize text between words.

**Accepted:** I love\*\*\*bold and italic\*\*\*text. **Not Accepted:** I love\_\_bold and italic\_\_text.

**7. Blockquotes:** To create a blockquote, add one > (greater than symbol) in the beginning of a paragraph.

For instance, the sentence > I love Blockquotes. will render the output as below:

I love Blockquotes.

Blockquotes can also be nested, which is call **Nested Blockquotes**. Add two >> (greater than symbol) in the beginning of the paragraph you want to nest.

For example:

> I love Blockquotes.

>> I love Nested Blockquotes.

Will be rendered as below:

I love Blockquotes.

I love Nested Blockquotes.

**Note:** Post using the Blockquote, provide a blank line before and after Blockquote to exit it. Otherwise, Markdown will consider the following lines as part of the Blockquote as well.

**Accepted:** Put a blank line before...

> This is a blockquote

...and after a blockquote.

**Not Accepted:** Put a blank line before... > This is a blockquote >...and after a blockquote.

**8. Ordered Lists:** To create an ordered list, add line items with numbers followed by period and a space. The numbers don't have to be in numerical order, but the list should start with the number one. Additionally, you can create nested ordered lists by indenting one or more items by giving a tab space. The table below illustrates various methods for using ordered lists.

## Markdown

- 1. First item
- 2. Second item
- 3. Third item
- 4. Fourth item

## Rendered Output

- 1. First item
- 2. Second item
- 3. Third item
- 4. Fourth item

- 1. First item
- 1. Second item
- 1. Third item
- 1. Fourth item

- 1. First item
- 2. Second item
- 3. Third item
- 4. Fourth item

- 1. First item
- 8. Second item
- 3. Third item
- 5. Fourth item

- 1. First item
- 2. Second item
- 3. Third item
- 4. Fourth item

- 1. First item
- 2. Second item
- 3. Third item
  - 1. Indented item
  - 2. Indented item
- 4. Fourth item

- 1. First item
- 2. Second item
- 3. Third item
  - 1. Indented item
  - 2. Indented item
- 4. Fourth item

**Note:** CommonMark and a few other lightweight markup languages let you use a close parenthesis ) as a delimiter (e.g., 1) First item), but not all Markdown applications support this, so it isn't a great option from a compatibility perspective. For compatibility, use periods only.

**9. Unordered Lists:** To create an unordered list, add dashes (-), asterisks (\*), or plus signs (+) in front of line items followed by a space. Additionally, you can create nested unordered lists by indenting one or more items by giving a tab space. The table below illustrates different methods for using unordered lists.

## Markdown

- First item
- Second item
- Third item
- Fourth item

## Rendered Output

- First item
- Second item
- Third item
- Fourth item

- \* First item
- \* Second item
- \* Third item
- \* Fourth item

- First item
- Second item
- Third item
- Fourth item

- + First item
- + Second item
- + Third item
- + Fourth item

- First item
- Second item
- Third item
- Fourth item

- First item
- Second item
- Third item
  - Indented item
  - Indented item
- Fourth item

- First item
- Second item
- Third item
  - Indented item
  - Indented item
- Fourth item

**Note:** Some Markdown applications don't agree on how to handle different delimiters in the same list. For compatibility, don't mix and match delimiters in the same list — pick one and stick with it.

**Accepted:** - First item - Second item - Third item - Fourth item

**Not Accepted:** - First item + Second item \* Third item -Fourth item

**10. Fenced Code Blocks:** To create Fenced Code Blocks, use three backticks (```) or three tildes (~~~) on the lines before and after the code block. It can be used provide code snippets in the lab guide.

For instance, the following content:

```
```  
Code Block Line 1  
Code Block Line 2  
```
```

Will be rendered as below:

Plain text COPY

```
code BLOCK Line 2
```

**11. Horizontal Rules:** To create a horizontal line, use three or more asterisks (\*\*\*) or underscores (\_\_\_\_) on a line. This can be used to indicate beginning or closing of a section.

For example, the following content:

Plain text COPY

```
TASK 1.
```

Congratulations, you have successfully completed Task 1.

---

Will be rendered as below:

**Task 1:**

Congratulations, you have successfully completed Task 1.

**12. Backticks:** To highlight text or sentence, use one backtick (`) before and after the text or sentence.

For example, the following content:

Plain text COPY

```
I `LOVE` BACKTICKS.
```

Will be rendered as:

I love Backticks.

I love Backticks.

**Note:** Backticks only works within the same line.

**13. Links:** To create a link, enclose the link text in brackets (e.g., [Google]) and then follow it immediately with the URL in parentheses (e.g., (<https://google.com>)).

The following sentence:

Don't know something, just [Google](<https://google.com>) it.

Will be rendered as:

Don't know something, just [Google](#) it.

**14. Images:** To add an image, add an exclamation mark (!), followed by the optional image description in brackets which is not visible to end users, and the path or URL to the image asset in parentheses.

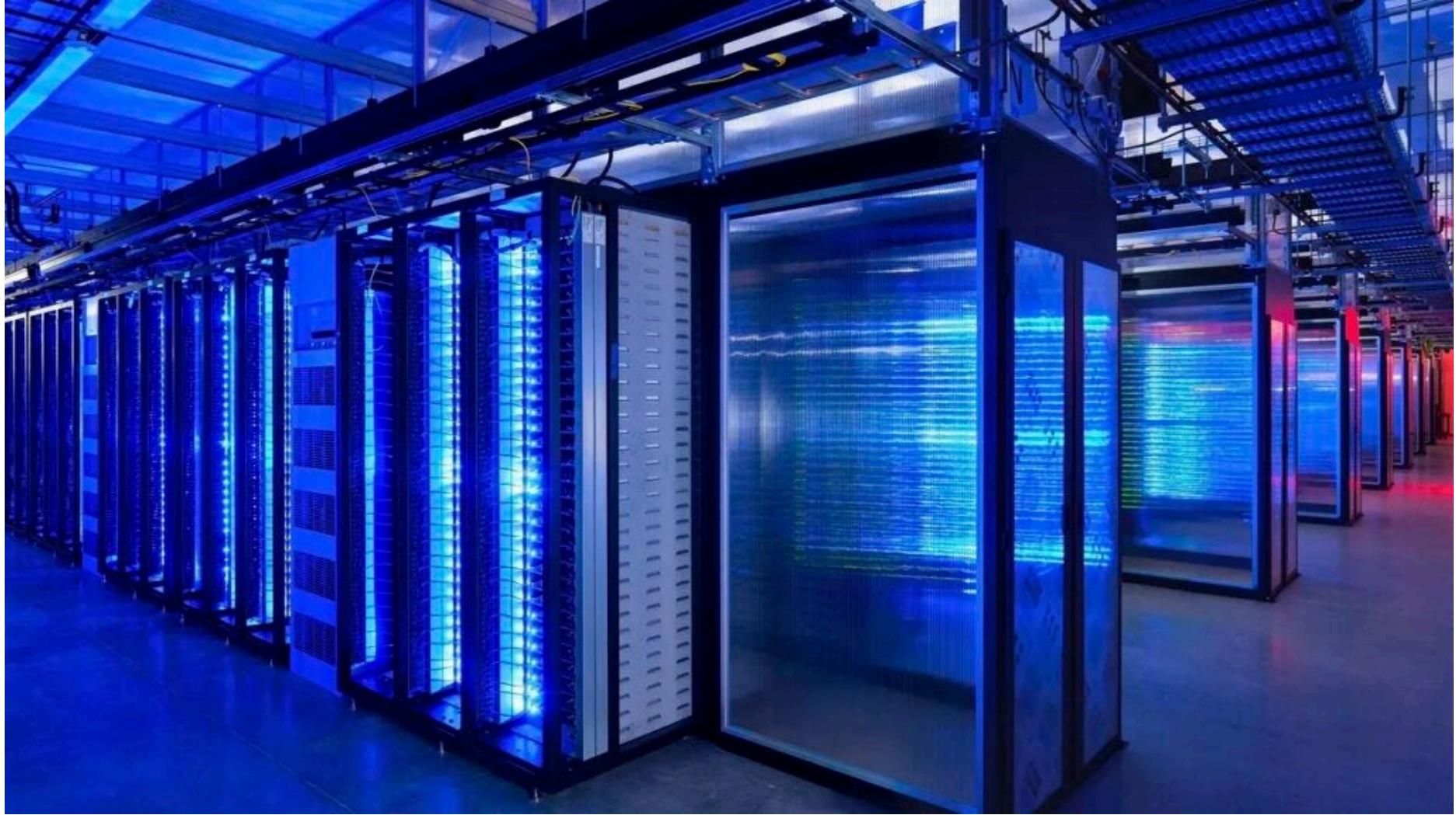
To render an image in web, use the image URL:

```
![Datacenter](https://cloudlabsai.blob.core.windows.net/docs/datacenter.jpg)
```

To render an image in local path, such as GitHub, use:

```
![Datacenter](./images/datacenter.jpg)
```

The image will be rendered as below:



**Note:**

When using images through local path, create a separate folder for images outside the Markdown document folder, then provide the path to the file which will be in the format `./images/<ImageFileName>`.

Do not provide a space after square brackets

**15. Tables:** Markdown also supports tables. You can create a table by using hyphens (-) and vertical bars (|). Refer the below example:

The Markdown table below:

Plain text

1	India	New Delhi
2	United States	Washington D.C.
3	China	Beijing

COPY

Will be rendered as:

SL No	Country	Capital
1	India	New Delhi
2	United States	Washington D.C.
3	China	Beijing

Note:

1. You cannot use many Markdown syntax elements to format the text in table cells. Some of the elements that work inside a table are **Backticks**, **Bold** and **Italic**.
2. If you do not want a header row, then leave it empty.

## Markdown Content Sample

The below content contains all the Markdown elements you have learnt in this doc to create a lab guide.

Plain text

COPY

## # CloudLabs

\*\*CloudLabs\*\* is a platform created by \*\*[Spektra Systems LLC](https://spektrasytems.com)\*\*. Fou

`Spektra's products` enables organizations around the globe to continue innovate and stay relevan

SL No	Product Name	Description
1	CloudLabs	CloudLabs provides hands-on lab environments for technology companies to showcase their products and services.
2	SaaSify	SaaSify platform is designed for ISVs to sell, manage, and grow their software products.
3	CloudEvents	CloudEvents is a comprehensive platform designed for organizers to manage events and attendees.
4	CSP Control Center	CSP Control Center aka C3 is a cloud platform built for Microsoft partners to manage their CSP accounts.

![Spektra's products](https://cloudlabsai.blob.core.windows.net/docs/spektra-products.png)

## ## Why choose CloudLabs?

Ever since the COVID-19 widespread, learning and experiencing products remotely has become a new norm.

- \*\*Impactful Learning Experiences:\*\* Providing a stimulative and demonstrative way to learn through interactive experiences.
- \*\*Proven For Scale:\*\* Be it 10 instances or 10,000, we are equipped to deploy, manage, and support large-scale operations.
- \*\*Increased Market Outreach:\*\* With the freedom to access from anywhere, anytime, showcase your products to a global audience.

- **24/7 Support:** Our team is available 24\*7 to provide instant support for any technical and non-technical queries.
  - **Experienced Team:** To date, over \*\*\*828680\*\*\* labs have provisioned, training more than \*\*\*1000\*\*\* users.
- > **Note:** 24/7 live chat support is only available under \*\*\*premium\*\*\* agreement.
- 

## CloudLabs

**CloudLabs** is a platform created by [Spektra Systems LLC](#). Founded in the year 2015, we are now one of the top partner focused cloud solutions company.

Spektra's products enables organizations around the globe to continue innovate and stay relevant in ever changing technology world. Our products and services come with personalized white-glove onboarding and account managers to assure our customer and partner's success. Our products include:

SL No	Product Name	Description
1	CloudLabs	CloudLabs provides hands-on lab environments for technology companies for events, workshops and POCs at scale. CloudLabs empowers instructors and students through modern technology experiences to enable impactful learning experiences.
2	SaaSify	SaaSify platform is designed for ISVs to sell, manage, and grow their SaaS sales through Cloud Marketplaces including AWS Marketplace, Azure Marketplace & Google Cloud Marketplace.
3	CloudEvents	CloudEvents is a comprehensive platform designed for organizers to host customized virtual events specific to their requirements. Host large-scale events hassle-free, with minimal customer

		intervention, easy platform design, and fast onboarding.
4	CSP Control Center	CSP Control Center aka C3 is a cloud platform built for Microsoft CSP Partners, enabling them to distribute, sell, bill and provision cloud solutions. C3 provides CSP partners a white-labelled self-service marketplace with all billing automation and invoicing capabilities.



## Why choose CloudLabs?

Ever since the COVID-19 widespread, learning and experiencing products remotely has become a new normal. **CloudLabs** platform offers:

- **Impactful Learning Experiences:** Providing a stimulative and demonstrative way to learn through cutting edge hands-on-labs that perform reliably and responsively.
- **Proven For Scale:** Be it 10 instances or 10,000, we are equipped to deploy, manage, and support thousands of lab environments at scale.
- **Increased Market Outreach:** With the freedom to access from anywhere, anytime, showcase your product to a wider customer base around the world.
- **24/7 Support:** Our team is available 24\*7 to provide instant support for any technical and non-tech problems.
- **Experienced Team:** To date, over **828680** labs have provisioned, training more than **449316** participants.

**Note:** 24/7 live chat support is only available under **premium** agreement.

Now that you know the basics of Markdown language, you can now start authoring lab guides for your lab participants.

[\*\*<< Authoring Lab Guides\*\*](#)