Documentation

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st.write

Streamlit Version Version 1.41.0

Write arguments to the app.

This is the Swiss Army knife of Streamlit commands: it does different things depending on what you throw at it. Unlike other Streamlit commands, write() has some unique properties:

1. You can pass in multiple arguments, all of which will be written.
2. Its behavior depends on the input types as follows.
3. It returns None, so its "slot" in the App cannot be reused.

Function signature[source]

st.write(*args, unsafe_allow_html=False, **kwargs)

Parameters

*args (any)

One or many objects to print to the App.

Arguments are handled as follows:

- write(string) : Prints the formatted Markdown string, with support for LaTeX expression, emoji shortcodes, and colored text. See docs for st.markdown for more.

- write(dataframe) : Displays any dataframe-like object in an interactive table.
- write(dict) : Displays dict-like in an interactive viewer.
- write(list) : Displays list-like in an interactive viewer.
- write(error) : Prints an exception specially.
- write(func) : Displays information about a function.
- write(module) : Displays information about a module.
- write(class) : Displays information about a class.
- write(DeltaGenerator) : Displays information about a DeltaGenerator.
- write(mpl_fig) : Displays a Matplotlib figure.
- write(generator) : Streams the output of a generator.
- write(openai.Stream) : Streams the output of an OpenAI stream.
- write(altair) : Displays an Altair chart.
- write(PIL.Image) : Displays an image.
- write(keras) : Displays a Keras model.
- write(graphviz) : Displays a Graphviz graph.
- write(plotly_fig) : Displays a Plotly figure.
- write(bokeh_fig) : Displays a Bokeh figure.
- write(sympy_expr) : Prints SymPy expression using LaTeX.
- write(htmlable) : Prints _repr_html_() for the object if available.
- write(db_cursor) : Displays DB API 2.0 cursor results in a table.
- write(obj) : Prints str(obj) if otherwise unknown.

unsafe_allow_html (bool)

Whether to render HTML within `*args`. This only applies to strings or objects falling back on `_repr_html_()`. If this is `False` (default), any HTML tags found in `body` will be escaped and therefore treated as raw text. If this is `True`, any HTML expressions within `body` will be rendered.

Adding custom HTML to your app impacts safety, styling, and maintainability.

Note

If you only want to insert HTML or CSS without Markdown text, we recommend using `st.html` instead.

**kwargs (any)

delete

`**kwargs` is deprecated and will be removed in a later version. Use other, more specific Streamlit commands to pass additional keyword arguments.

Keyword arguments. Not used.

Example

Its basic use case is to draw Markdown-formatted text, whenever the input is a string:

```
import streamlit as st

st.write("Hello, *World!* :sunglasses:")
```

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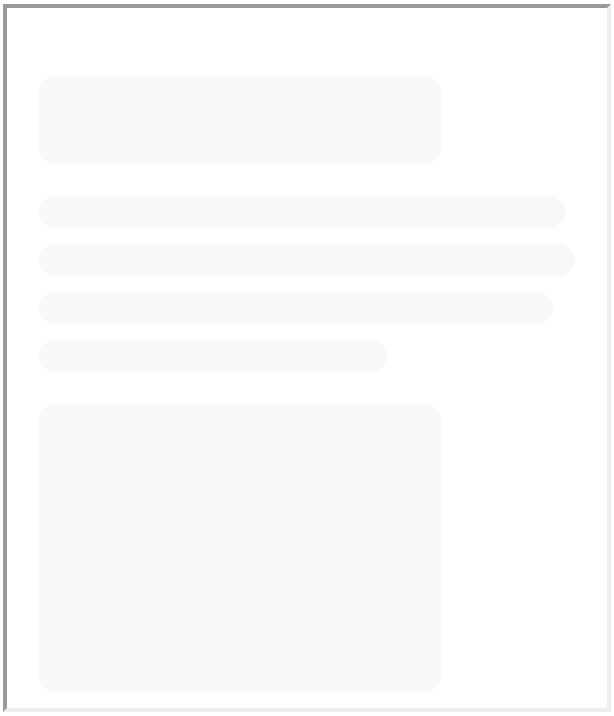
As mentioned earlier, `st.write()` also accepts other data formats, such as numbers, data frames, styled data frames, and assorted objects:

```
import streamlit as st
import pandas as pd

st.write(1234)
st.write(
    pd.DataFrame(
        {
            "first column": [1, 2, 3, 4],
            "second column": [10, 20, 30, 40],
        }
    )
)
```



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Finally, you can pass in multiple arguments to do things like:

```
import streamlit as st
```

```
st.write("1 + 1 = ", 2)
st.write("Below is a DataFrame:", data_frame, "Above is a dataframe.")
```

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Oh, one more thing: `st.write` accepts chart objects too! For example:

```
import streamlit as st
import pandas as pd
import numpy as np
import altair as alt

df = pd.DataFrame(np.random.randn(200, 3), columns=["a", "b", "c"])
c = (
    alt.Chart(df)
    .mark_circle()
    .encode(x="a", y="b", size="c", color="c", tooltip=["a", "b", "c"])
)

st.write(c)
```

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Featured video

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Learn what the `st.write` and magic commands are and how to use them.

←Previous: Write and magicNext: st.write_stream→
forum

Still have questions?

Our forums are full of helpful information and Streamlit experts.

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forum Ask AI