

Understanding Braces in Python's str.format()

Python's `str.format()` uses braces `{}` as placeholders. To include literal braces, you need to escape them using `{{` and `}}`. Let's break it down with examples:

1. `a = "{}"`

`{}` → placeholder

"hi" is passed to `format()`

Output: hi

2. `b = "{{}}"`

"`{{}}`" → interpreted as `"{}"` (literal braces)

Now it acts as a placeholder

Output: `{}`

3. `c = "{{{}}}"`

"`{{{}}}`" → breaks into:

`{{` → literal `{`

`{}` → placeholder

`}}` → literal `}`

Output: `{hi}`

Final Outputs

Code	Output
<code>print(a.format("hi"))</code>	hi
<code>print(b.format("hi"))</code>	<code>{}</code>
<code>print(c.format("hi"))</code>	<code>{hi}</code>

General Rule for Braces

Format String	Meaning	Example Output (with <code>.format('hi')</code>)
<code>{}</code>	Placeholder	hi
<code>{{}}</code>	Escaped braces → <code>'{}'</code>	<code>{}</code>
<code>{{{}}}</code>	Literal <code>{</code> + placeholder + literal <code>}</code>	<code>{hi}</code>
<code>{{{{{}}}}</code>	Literal <code>{{</code> (double-escaped)	<code>{{}}</code>