# equation_label_in_code_chunks

**Equation generated by code chuncks**

Quarto lets you add a label and captions for figure and table generated by code chunks, but doesn't do the same for **equation generated by code chunks**.

Let's use `sympy` package to generate a simple symbolic equation:

```python
from sympy import *
var('x y z')      # add some symbols
eq1 = Eq(x, y+z)     # add one equation
eq1 # display the equation
```

$x = y + z$

If I try to add a `#| label` field to the code chunk, in the same fashion of a table or figure, **it has no effect** and if trying to reference the equation (see Figure 1) doesn't work:

If I try to add a `#| label` field to the code chunk, in the same fashion of a table or figure, **it has no effect** and if trying to reference the equation (**?@eq-1**) doesn't work:

```
eq1
```

Figure 1: missing reference

```
eq1
```

$x = y + z$

If I wrap the `latex(eq1)` in the latex equation environment `$$...$$ {#eq-x}` then it works:

```python
from IPython.display import Markdown

label = '#eq-1'

Markdown(
    f"$$\n{latex(eq1)}\n$${{{label}}}"""
)
```

$$x = y + z \tag{1}$$

Now the equation is numbered and also it can be referenced properly (Equation 1), but the label is not listed in the autocompletion reference (Figure 2):
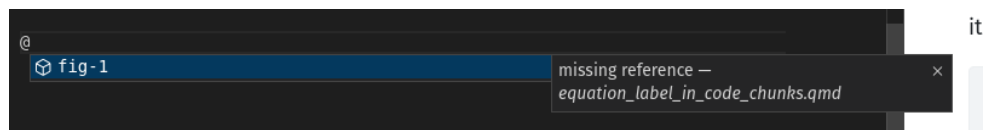


Figure 2: The reference isn't available in the autocompletion list