

# Visualizing Assignment Statements

On the Resources page is a link to a Python Visualizer that follows the model we use to draw pictures of computer memory.

Consider this code:

```
x = 1
y = x + 2
x = 7
```

When we trace this in the visualizer and click button Forward twice, this is the result:

```
1 x = 1
2 y = x + 2
3 x = 7
```

[Edit code](#)

<< First < Back Step 3 of 3 Forward > Last >>

→ line that has just executed  
→ next line to execute

Frames	Objects
Global variables	
x	id1: int 1
y	id2: int 3

Clicking Forward once more results in this:

```
1 x = 1
2 y = x + 2
3 x = 7
```

[Edit code](#)

<< First < Back Program terminated Forward > Last >>

→ line that has just executed  
→ next line to execute

Frames	Objects
Global variables	
x	id2: int 3
y	id3: int 7

Notice that y's value did not change during this step.

Here is [a link to the Python Visualizer](#) containing this code so that you can explore this yourself. **We strongly encourage you to step forward and backward through this program until you understand every step of execution.**

