Cognitive Walkthrough - JupyterLab
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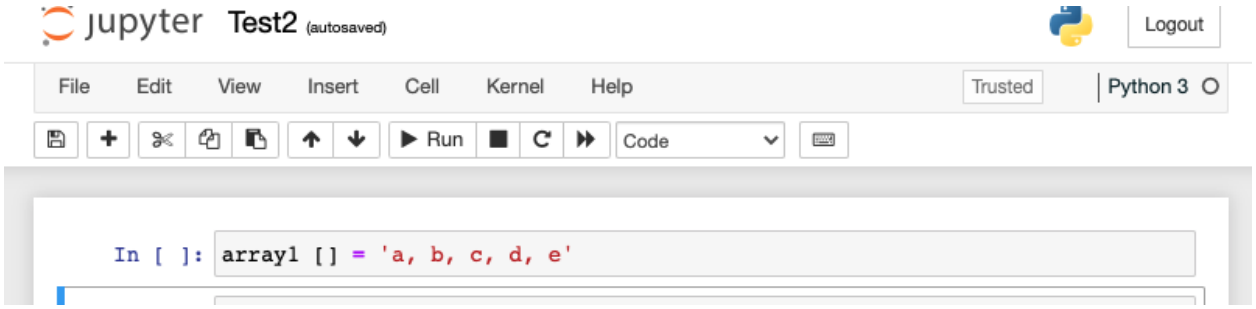
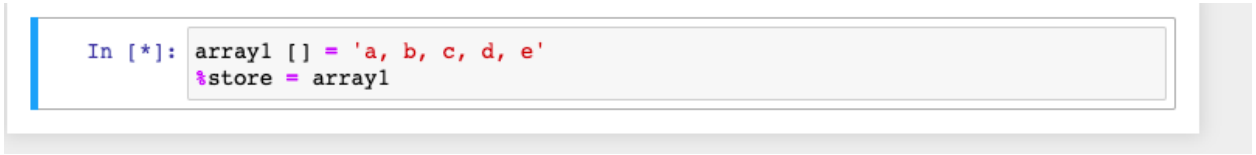
Passing Data through Notebooks
Launched jupiter application using command jupyter notebook in command line

```
achins-MacBook-Air:~ sachinbetrabet$ jupyter notebook
I 2021-11-18 23:17:09.138 LabApp] JupyterLab extension loaded from /Library/Fra
eworks/Python.framework/Versions/3.8/lib/python3.8/site-packages/jupyterlab
I 2021-11-18 23:17:09.138 LabApp] JupyterLab application directory is /Library/
```

This was pretty easy as someone who was familiar with the program. However, for beginners, even accessing the command line can be difficult and having to remember the exact syntax for launching the program could be a point of frustration.
After I launched two notebooks, which was pretty easy, I created a data array that I wanted to send to the other notebook.

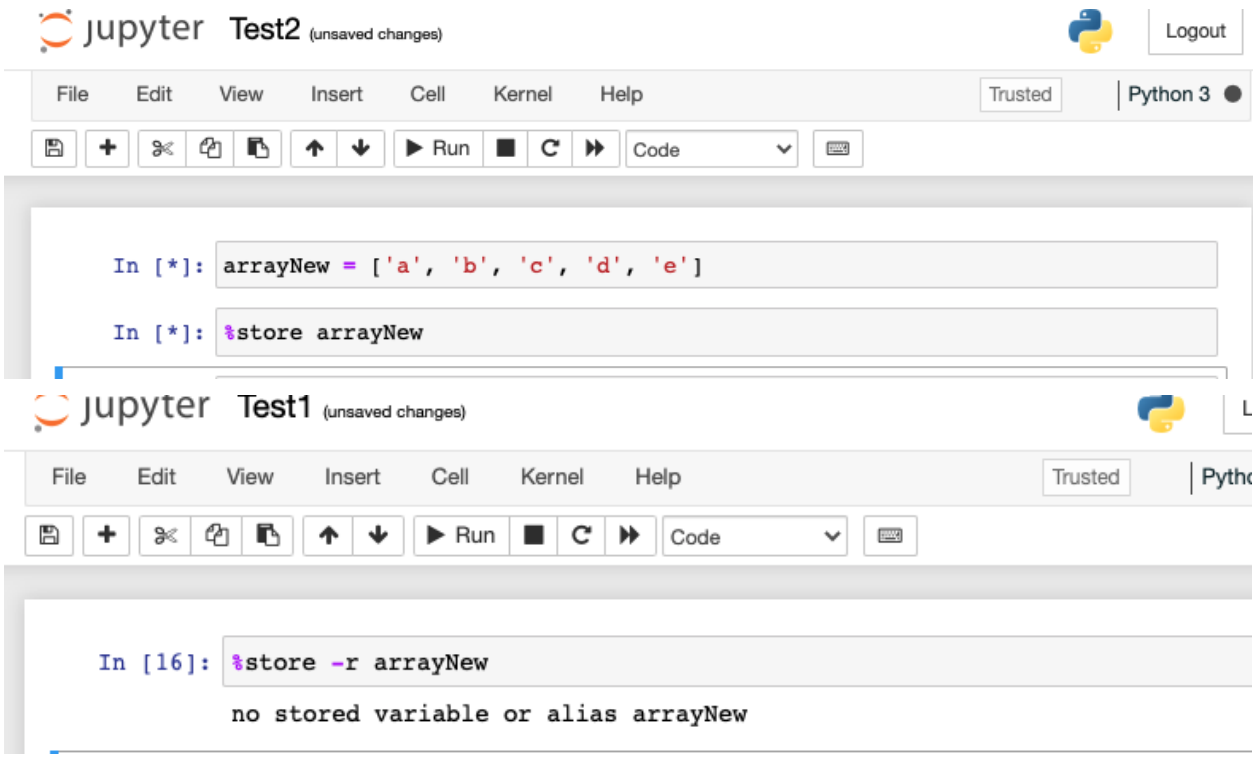


Here, I was stuck. I tested out all the different drop down menus (file, edit, view, insert, cell, kernel, help) at the top and could not find a method that specified how to transfer data. This could be really confusing for a new user.
After being stuck for a while, I did what every person does and googled my problem. I entered the search term: “pass data through notebooks jupyter lab” into the search bar. The first response came up with a stack overflow solution that involved using %store. I tried this out on my own notebook.



And then in my other notebook:

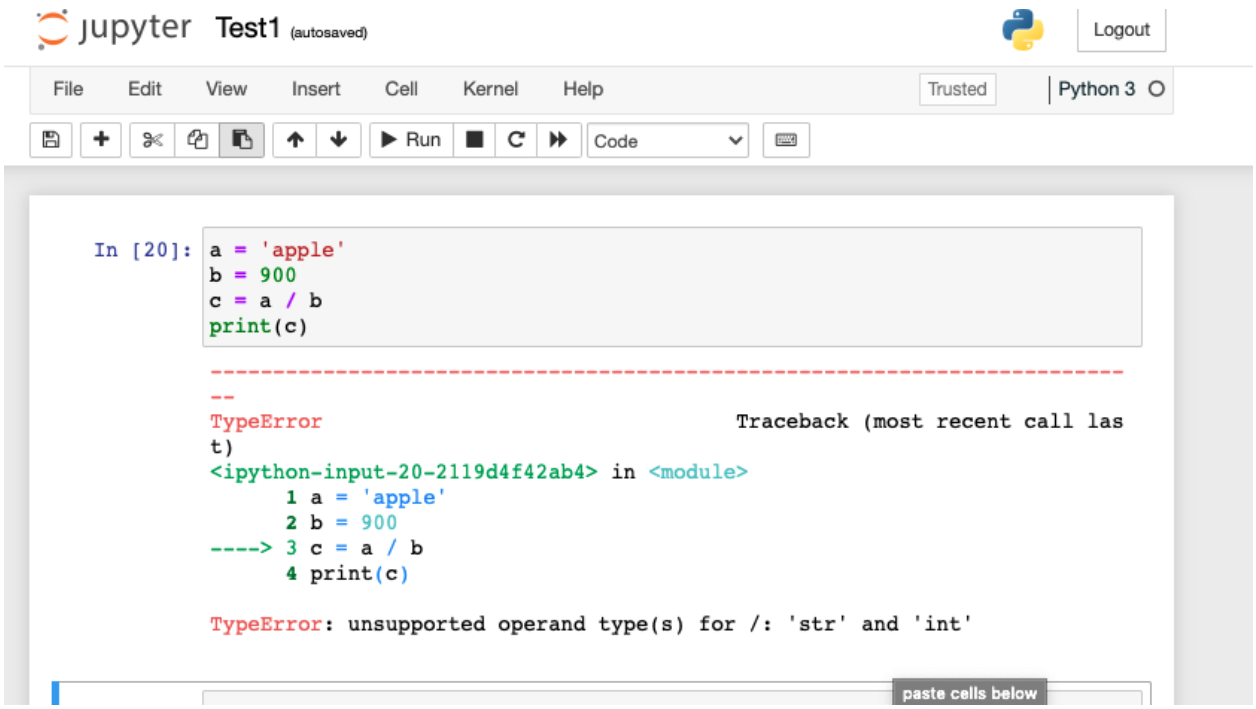
Clearly, this did not work. I read the documentation again and saw that I should not set %store equal to the data. Instead, I should have just listed the data next to it. Here are the notebooks after I corrected myself:



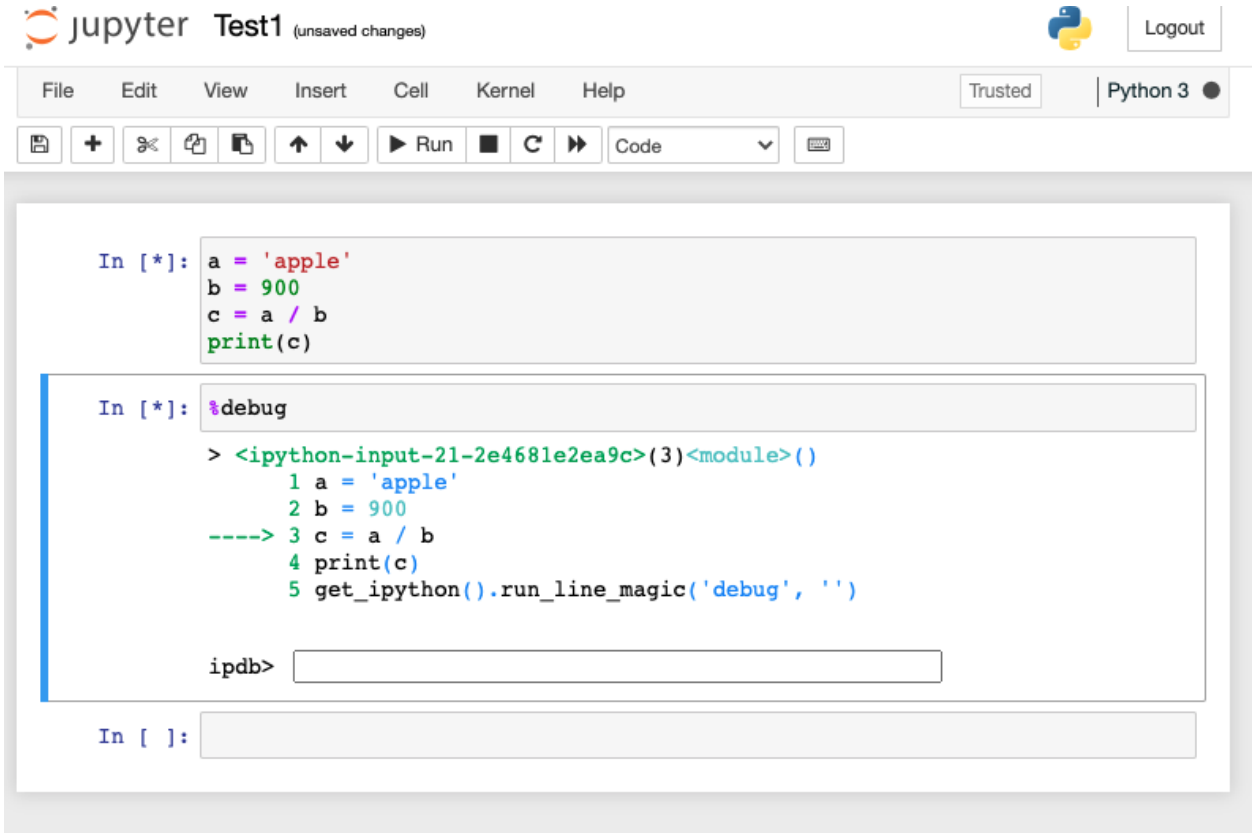
After debugging for a long time, I still could not get the transfer to work. Therefore, I think this feature is not good. I tried to change the variable names and everything and the process did not work. I tried alternating which cell the commands were in and it still did not work. I would recommend a rewrite of this tool to make the syntax easier to use. I would have a box in the drop down menu that would enable the user to select which variables could be shared to other notebooks.

Using %debug Feature

I created a notebook and added a clearly wrong python program to debug:



I was not sure where to use the %debug feature that I had read about, so I put it in the next cell.



The error message using the %debug was less clear than the previous error message. There was no reference to the unsupported operand type that was the problem. Instead, the %debug feature just pointed out the line that had the error which was information that was already known from

the previous error message. I think this feature could be reworked to show more detail about what was wrong. More information would be useful for more complicated programs.