jupyter_tips

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1 Jupyter Notebook Tips

1.1 To toggle between edit(green) and command(blue) MODES

Enter COMMAND mode: "Esc"

Enter EDIT mode: "Enter"

To execute a cell and go to next cell: "Enter" + "Shift"

1.2 To comment/uncomment a block of code

For Ubuntu/Windows 10 Use:

```
Ctrl + /
```

For Mac:

```
CMD + /
```

1.3 To indent lines in markdown

Use '>' in front of line:

```
> 1. How do make a **random move in two dimensions**?

> 2. How do code the random walk with both **x and y components** ?
```

1.4 To toggle seeing a cell's output

```
ESC + o
```

1.5 To create a copy of a notebook under a new name

```
Flle >  Make a copy
```

1.6   To halt the execution of a cell

```
Ctrl + C
```

1.7   To clear all output from notebook

```
Cell > All output > Clear
```

1.8   To incorporate an image into markdown

Using HTML:

```
<img src="./unit-circle.png" width="300" align="left">
```

Using IPython display:

"' from IPython.display import display display(Image('./images/ml_demonstration.png, width=100))"'

1.9   To include separating lines into markdown

```
<hr style="border:4px solid blue"> </hr>
```

1.10   To change text color/font add HTML tag

```
<span style="color:red">
text...
</span>
```

1.11   To copy and paste cells between notebooks

1. Select Cell and press Esc to go to command mode
2. Hit Shift + Up or Shift + Down to select multiple cells
3. Copy cellsith Ctrl + C
4. In different notebook, Paste with Ctrl + V (in command mode)
5. You maybe asked to repeat Ctrl + V

1.12   To load an external file into a notebook cell

```
%load jnb_list.txt
```

1.13 To write contents of a cell to an external file

```
%%writefile pythoncode.py
import numpy
def append_if_not_exists(arr, x):
 if x not in arr:
 arr.append(x)def some_useless_slow_function():
 arr = list()
    for i in range(10000):
        x = numpy.random.randint(0, 10000)
    append_if_not_exists(arr, x)
```

1.14 To run a python file (or notebook) and show output

```
%run rw2d_target.py

# this will execute and show the output from
# all code cells of the specified notebook

%run ./two-histograms.ipynb
```

1.15 To time the execution of cell's codel

```
# Runs statements 100,000 times (by default), provides the mean of the fastest three times.
%%timeit
x = [y**3 for y in range(1000)]
```

Output: 8.9 µs $\pm$ 639 ns per loop (mean $\pm$ std. dev. of 7 runs, 100000 loops each)

1.16 To reload a user module (if changed)

```
import <module-name>
from importlib import reload
relaod <module-name>
```

1.17 To plot inside notebook with malplotlib

```
%matplotlib inline
```

1.18 To create slides using notebook with RISE

To install RISE (reveal.js)

```
conda install -c conda-forge rise
```

OR

```
pip install RISE`
```

1.19 To print out a PDF file of a notebook

```
File > Download as... > PDA via Latex (.pdf)
```

```
[ ]:
```