Bitcoin Notebook Hello World

November 15, 2015

This is a demonstration connecting Rusty Russell's `bitcoin-iterate` to the Jupyter iPython Notebook. The `bi` Python function is a small glue layer between `bitcoin-iterate` and the notebook software.

Using this tool you can quickly and easily make `bitcoin-iterate` queries, process the results, and then graph them in a way that is reproduceable and literate.
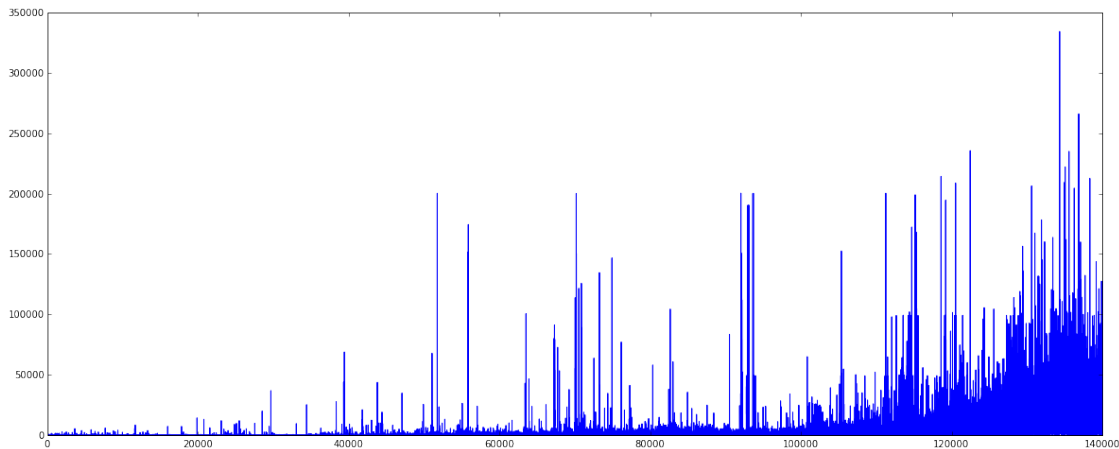
The source code is available at bitcoin-notebook on GitHub.

```
In [4]: from bi import bi
        import matplotlib.pyplot as plt
        %matplotlib inline
```

Basic graph of Block length over time (up to block 140000).

```
In [5]: result = bi("--block %bl --end=140000")

        plt.figure(figsize=(20,8))
        plt.plot(result["results"]["%bl"], label="%bl")
        plt.show()
```
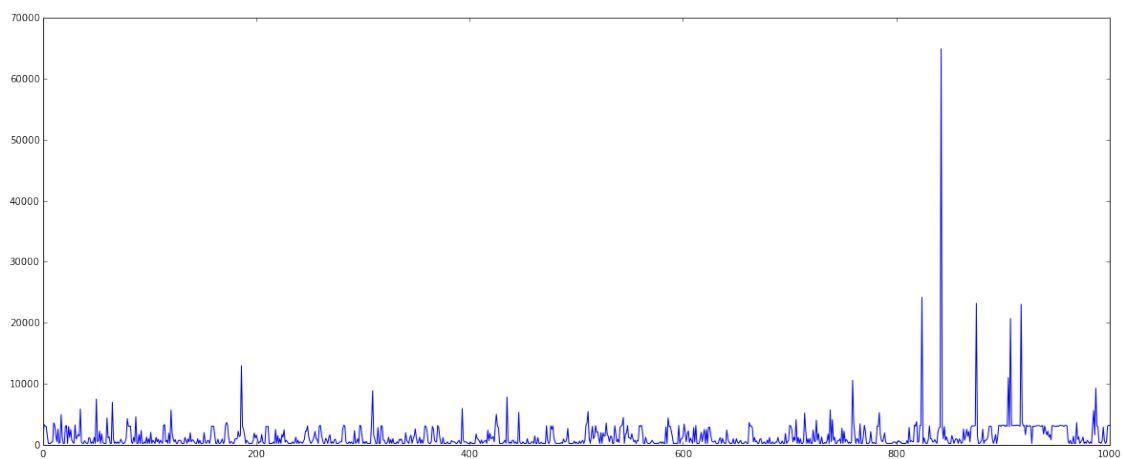

Example of a smaller chunk of block lengths.

```
In [6]: result = bi("--block %bl --start=100000 --end=101000")

        plt.figure(figsize=(20,8))
        plt.plot(result["results"]["%bl"], label="%bl")
        plt.show()
```

Enjoy!