Monte-Carlo Guesstimate with confidence

From wikipedia:

"A back-of-the-envelope calculation is a rough calculation, typically jotted down on any available scrap of paper such as the actual back of an envelope. It is more than a guess but less than an accurate calculation or mathematical proof."

Instead of coming up with a single-value estimate, this app generates distribution and draws interval covering 95% of the distribution. As an input, it takes a function that computes a quantity to estimate. Each argument of this function is specified by its distribution. Monte-Carlo simulations are performed to come up with a distribution of the output quantity.

This software is similar to https://github.com/getguesstimate/guesstimate-app, but simpler, uses python and has programmatic interface instead of graphical.

Dependencies

- python3
- numpy
- matplotlib

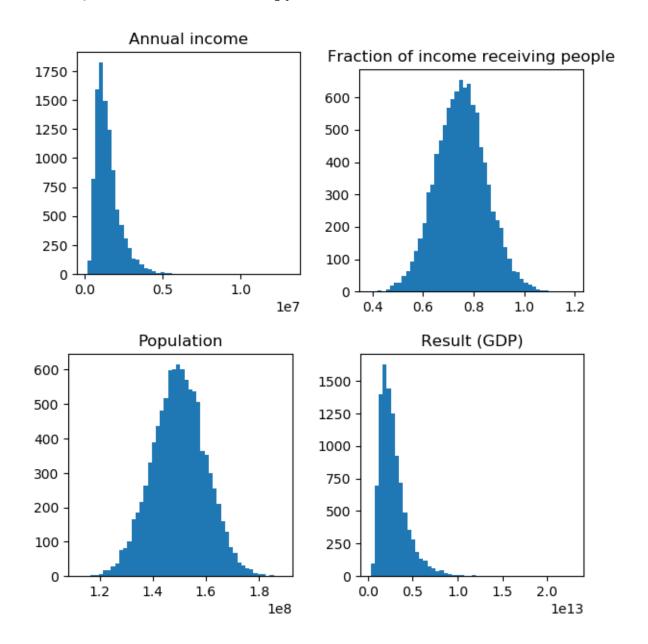
Usage

```
Use as a commandline tool

python gst.py ./default_model.py

Copy and modify ./default_model.py. Run with your modified file. Profit?
```

Gallery for default_model.py



References

 $\bullet \ \ https://en.wikipedia.org/wiki/Guesstimate$

- https://en.wikipedia.org/wiki/Back-of-the-envelope_calculation https://en.wikipedia.org/wiki/Fermi_problem