Filename: ./mprun_demo.py

```
Line # Mem usage Increment Line Contents
_____
   4 71.9 MiB 0.0 MiB L = [j \land (j >> i) \text{ for } j \text{ in range}(N)]
```

Filename: ./mprun_demo.py

Line #	Mem usage	Increment	Line Contents
======	========	========	=======================================
1	39.0 MiB	0.0 MiB	<pre>def sum_of_lists(N):</pre>
2	39.0 MiB	0.0 MiB	total = 0
3	46.5 MiB	7.5 MiB	for i in range(5):
4	71.9 MiB	25.4 MiB	$L = [j ^ (j >> i) for j in range(N)]$
5	71.9 MiB	0.0 MiB	total += sum(L)
6	46.5 MiB	-25.4 MiB	del L # remove reference to L
7	39.1 MiB	-7.4 MiB	return total

Here the Increment column tells us how much each line affects the total memory budget: observe that when we create and delete the list L, we are adding about 25 MB of memory usage. This is on top of the background memory usage from the Python interpreter itself.

For more information on %memit and %mprun, as well as their available options, use the IPython help functionality (i.e., type **%memit?** at the IPython prompt).

More IPython Resources

In this chapter, we've just scratched the surface of using IPython to enable data science tasks. Much more information is available both in print and on the Web, and here we'll list some other resources that you may find helpful.

Web Resources

The IPython website

The IPython website links to documentation, examples, tutorials, and a variety of other resources.

The nbviewer website

This site shows static renderings of any IPython notebook available on the Internet. The front page features some example notebooks that you can browse to see what other folks are using IPython for!