Introduction

ipy_table is a supporting module for IP[y]:Notebook which makes it easy to create formatted data tables.

Example

To create a table in interactive mode, import ipy_table and call make_table() on an array.

Notes:

- ipy_table can accept either a "native" array (a list of equal-length lists) or a numpy.ndarray.
- Arrays passed to ipy_table typically contain integers, floats or strings, but in general they can contain other object types and ipy_table will render the result of calling str() on those objects.

In [2]:
```
from ipy_table import *
planets = [
    ['Planet', 'Mass (kg)', 'Diameter (km)'],
    ['Mercury', 3.3022E23, 4879],
    ['Venus', 4.896E24, 12104],
    ['Earth', 5.972E24, 12735],
    ['Mars', 6.4191E23, 6772]];
make_table(planets)
```

Out[2]:

Planet	Mass (kg)	Diameter (km)
Mercury	330219999999999996854272.0000	4879
Venus	4896000000000000201326592.0000	12104
Earth	5972000000000000327155712.0000	12735
Mars	641910000000000065536000.0000	6772

The make_table() interface is interactive, so after calling make_table() we can call style formatting commands to modify the current table format. Here we'll apply the "basic" table theme.

Note: Use "basic_left" for tables with row headers. Use "basic_both" for tables with row and coulmn headers.

In [3]:
```
apply_theme('basic')
```

Out[3]:

Planet	**Mass (kg)**	**Diameter (km)**
Mercury	330219999999999996854272.0000	4879
Venus	4896000000000000201326592.0000	12104
Earth	5972000000000000327155712.0000	12735
Mars	641910000000000065536000.0000	6772

The Mass values are being fully expanded. By default ipy_table formats floating point numbers using the Python formatting string "%0.4f". We can override that by setting the "float_format" parameter.

In [4]:
```
set_global_style(float_format='%0.3E')
```

Out[4]:

Planet	Mass (kg)	Diameter (km)
Mercury	3.302E+23	4879
Venus	4.896E+24	12104
Earth	5.972E+24	12735
Mars	6.419E+23	6772

All cell formatting is dynamic. Custom formatting can be applied by calling set_[global, row, column, cell]_style().

In [5]:
```
set_row_style(3,color='yellow')
```

Out[5]:

Planet	Mass (kg)	Diameter (km)
Mercury	3.302E+23	4879
Venus	4.896E+24	12104
Earth	5.972E+24	12735
Mars	6.419E+23	6772

For documentation on all ipy_table commands, see the ipy_table reference notebook (ipy_table-Reference.ipynb)