

Example usage of py2note

This file illustrates the use of py2note with a simple code example. We can write extensive documentation in comments here in the file and use any rst-directive that we need. For example, we can use the math directive,

$$F(x) = \int_{-\infty}^x f(x) \, dx$$

to create formulas. In contrast to the way they look in the code, these formulas are set using the respective rst-processor and can look quite fine. Yet, we can also write code

```
>>> x = 2.  
>>> y = x + 3
```

Finally, we can obviously use any function that we defined before the starting statement, such as

```
>>> print myfunction(x)  
4.0
```

Furthermore, continued lines will be recognized and printed as continued docstrings

```
>>> for i in xrange(5):  
...     print i  
0  
1  
2  
3  
4
```

Now, one other point is that in some cases, we want to include one of the above functions in the resulting rst-document. For example, we might feel that knowing about myfunction is really crucial, we might want to include its docstring:

myfunction(x)

We can have a docstring here

In some cases, it isn't so much the docstring, but it's rather the implementation that matters. In that case, we can also include the source code:

```
>>> def myfunction(x):  
...     """We can have a docstring here"""  
...     return x**2
```

You can now run py2note on this file to generate an rst file and afterwards, you can for example convert the rst file to a pdf using rst2pdf:

```
rst2pdf example.rst
```