

```
1 # -*- coding: utf-8 -*-
2 """
3 Created on Wed Oct  8 17:17:48 2014
4
5 @author: bob
6 """
7
8 class ODESystem(object):
9
10     def __init__(self):
11         """
12         Constructor for ODE system. Input can take the form that the
13         subclasses desire. This abstract class is meant to create a common
14         interface that can be used by Integrator objects.
15         """
16         raise NotImplementedError
17
18     def f(self,t,y):
19         """
20         Return the righthand side of the ODE
21         """
22         raise NotImplementedError
23
24     def y_exact(self,t,y0):
25         """
26         Returns the exact solution for the ODE at times t,
27         starting from y0 at time t=0
28         """
29         raise NotImplementedError
30
31
```