EXERCISES:

INTRODUCTION

TO CLASSES

Exercise(s):

- define a class *Circle*

- takes *radius* as constructor

- default radius is 3

- has a single method *area()*

Solution:

```python
class Circle():
    def __init__(self, radius = 3):
        self.pi = 3.14
        self.r  = radius

    def area(self):
        return self.pi * self.r**2

small_circle = Circle()       # radius 3
large_circle = Circle(10)     # radius 10
small_area   = small_circle.area()
large_area   = large_circle.area()
```

Global frame

Circle
small_circle
large_circle
small_area 28.26
large_area 314.0

Circle class

__init__ function
__init__(self, radius)
default arguments:
radius 3

area function
area(self)

Circle instance
pi 3.14
r 3

Circle instance
pi 3.14
r 10