Procedure Exercises II

**4.** In Solar System Animation.py, change the **animateSolarSystem**() procedure in the so that it takes one or more parameters, which let the user control the appearance of the animation by passing it different arguments.

**5**. Write Python functions named **getCircleArea**( r ), **getTriangleArea**(b, h), **getRectangleArea**(l, w), **getTrapezoidArea**(b, t, h) and **getParallelogramArea**(b, h).   
  
Each function should return the area of the appropriate shape given its own set of dimensions.  
  
Next, write a Python procedure named **printArea**( shapeName ) that takes the name of a shape (e.g. “circle”) as its parameter and then does the following:

* Asks the user for the appropriate dimensions of that shape. For example, if shape == “circle” ask for the radius. If shape== “rectangle” ask for the length and width.
* Calls the matching function to get the area of the shape. For example, if   
  shape == “circle”, call the function **getCircleArea** with whatever argument the user entered for the radius.
* States the area in a sentence using a print statement.

Example

**printArea**( “trapezoid” ) would produce the output

Enter the length of the base of the trapezoid: 10

Enter the length of the top of the trapezoid: 8

Enter the height of the trapezoid: 5

The area of this trapezoid is 45.