

3. If you are using Python, several images are distributed with the **skimage** library. Enter **from skimage import data** at the prompt, and then open up some of the images. This can be done, for example, with

```
In : x = data.clock()

In : io.imshow(x)
```

List the data images and their types (binary, grayscale, color).

4. If you are using MATLAB, there are a lot of sample images distributed with the Image Processing Toolbox, in the **imdata** subdirectory. Use your file browser to enter that directory and check out the images.

For each of the images you choose:

- (a) Determine its type (binary, grayscale, true color or indexed color)
- (b) Determine its size (in pixels)
- (c) Give a brief description of the picture (what it looks like; what it seems to be a picture of)

7. The following shows the hexadecimal dump of a PNG file:

000000 8950 4e47 0d0a 1a0a 0000 000d 4948 4452	. P N G I H D R
000010 0000 012c 0000 00f6 0800 0000 0049 c4e5	. . . , I . .
000020 5400 0000 0774 494d 4507 d209 1314 1f0c	T . . . t I M E
000030 035d c49d 0000 0027 7445 5874 436f 7079	.] ' t E X t C o p y

Determine the height and width of this image (in pixels), and whether it is a grayscale or color image.