

# Erratalist for 4th Edition of A Primer on Scientific Programming with Python

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**Page 4.** The one-line program to be written in a text editor must have `t**2` and not `t^2`.

**Page 95.** In the program `c2f.py`, the `print` statement has a wrong formatting of the `F(C)` value: `%.51f` must read `%5.1f`, i.e., the same formatting as used for the `C` value.

**Page 99.** Heading in Section 3.1.5 should be *Function argument or global variable?* (or instead of *of*).

**Page 130.** In Exercise 3.6, Equation (3.10), the sum must be  $\sum_{i=0}^{n-1}$ .

**Page 158.** The terminal output for the integral  $\int_0^{\pi/2} \sin x \, dx$  should read 1, not 0.583009.

**Page 189.** In the `mymod.py` module, an `import sys` is needed in the test block before `print add1(float(sys.argv[1]))`.

**Page 189.** The last code showing the test block of the `interest` module needs two corrections: division by 365 if the expression for `years` and an `f` in the `print` statement:

```
if __name__ == '__main__':
    import sys
    p = float(sys.argv[1])
    years = days(1, 2, p)/365.0
    print 'With p=%.2f it takes %.1 years to double' % (p, years)
```

**Page 215.** In Exercise 4.17, the reference to the program `user_formula.py` should be `integrate.py`. The name of the resulting program is then better named `integrate2.py` than `user_formula2.py`.

**Page 273.** In the first code block, `x3 = mat(x).transpose()` should be `x3 = mat(x1).transpose()`.

**Page 315.** End of first paragraph: **Sun** is to be replaced by **Apple**.

**Page 426.** The argument in the `raise ValueError` call, after `if c*d <= 0`, needs a final `% other`.

**Page 447.** The title of the chapter should be *Random numbers and simple games*.

**Page 676.** The last line of the `integrate_ode.py` program should not contain `u'(t)=t**3`, but read

```
print "Numerical solution of u'(t)=%s: %.4f" % \
      (f_formula, integrate(T, n, u0))
```

The four terminal output sessions below are then also wrong: instead of `u'(t)=t**3` it should be `u'(t)=t**exp(t**2)`.

**Page 765.** Exercise 4.1: The exact solution is  $u(t) = 0.2e^{0.1t}$ .

**Page 789.** Exercise E.46: A value for  $I(0)$  is not given. Set  $I(0) = 0$ .

**Page 845-846.** To successfully execute the `c2f.py` program, `cmd` must be `python c2f.y 21` or `./c2f.py 21` (if `c2f.py` is an executable file) unless `.` is in the user's `PATH` variable.

**Page 846.** 2. Under *Split file or folder name*, the name **user** in the text should be replaced by `/home/hpl` according to the interactive session.

**Page 847.** The text says “The import statements can actually be dropped since functions from **numpy** and **matplotlib** are imported by default when running the notebook in the browser or by supplying the command-line argument `--pylab` when starting notebooks locally on your machine.”. Now, the use of `--pylab` is discouraged. Also, the functions from **numpy** and **matplotlib** are not automatically imported - you have to do that explicitly.

The recommended way of using IPython notebooks with **numpy** and **matplotlib** is to do

```
import numpy as np
import matplotlib.pyplot as plt
%matplotlib inline
```

If you want the notebook to behave more as Matlab and not use the `np` and `plt` interface, you can instead write

```
%pylab
```