1 Problem set 0

1.1 Install Python3

Install Python3. Install (at least) the packages gzip, numpy and matplotlib.

1.2 Read the test data file

Write a routine to read the provided data file testdata.7.gz. You only need to read the first and second columns of the file. The first column is the wavelength (in Å) and the second the flux (cgs). You will notice that the data are not sorted in wavelength. Sort the pairs (λ, F_{λ}) in wavelengths (increasing).

1.3 plot the data

Plot flux versus wavelength from $3000\,\text{Å}$ to $12000\,\text{Å}$. Try to reduce the (high) sampling rate of the data to a resolution of $10\,\text{Å}$ and overplot the results. Save the plot as PDF and PNG.