Exercise sheet 2
(Submit by email to dm@sfs.uni-tuebingen.de before class on Thursday, May 29)

Write the little programs below, naming them nr1.py, nr2.py, etc. Save them in a folder ex2-userid (e.g., ex2-dm) and send me an email with a tar.bz2 archive of that directory. Please make sure that it unpacks to a directory ex2-userid, not the individual files.

1. Create a web-based version of exercise sheet 1, program 3, using mod_python: Create a web form which allows you to enter a line of text, type return or click on a button, which should result in a web page with the results.

Here is the description of program 3 of exercise sheet 1 again:

- Write a program that will read in a line of text and print out how many times each letter occurs in the text, ignoring capitalization and spaces. Example:
  
  Input: This is a test.
  
  Output: t 2
  
  h 1
  
  i 2
  
  s 3
  
  a 1
  
  e 1

2. Create a web form in which one can specify a user id and click on a button to see the real name of that person on our system. The form should call mod_python to pass the user id to a python program, which calls finger to obtain the name listed after “In real life.”.

3. Write a program that uses wget to query the site www.wunderground.com for the weather conditions at the airport in Stuttgart (STR) and reports the current temperature and humidity, and when this information was last updated.

4. Write a program that asks the user for a directory name (specified as an absolute path) and calls the unix command ls to list the contents of the directory. Rather than display the output of ls directly, the program should show the listing such that each letter is replaced with the next one according to the ASCII table.