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.wundergound.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.