NPRG065: Progamming in Python

Practicals 5

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D3S

1. Create a program that prints out a textual file (given as a command-line argument) converted to upper case or lower case
   - the direction of conversion is determined by another argument:
   - `converter.py -U file` – to upper case
   - `converter.py -L file` – to lower case

2. Create a variant of the unix CUT tool
   - It splits the input to columns and prints out the chosen columns
   - It reads from the std input and prints to the std output
   - The command line arguments:
   - `-d`: column delimiter
   - `-f`: columns to be printed, comma-separated list of ranges:
     - N: N-th column
     - N-: from the N-th column to the last one
     - -M: from the first column to the M-th one
     - M-N: from the M-th column to the N-th one
     - the first column has index 1 (not 0)
   - Examples:
     - `cut.py -d : -f 1,3,5` : prints out the first, third and fifth column, the columns are delimited by ':'
     - `cut.py -d , -f 3-5,2` : prints out the third, fourth, fifth, and second columns, the delimiter is ','

3. Create a simple scheduler (a "TODO" list)
   - Data are stored in a file
   - Commands are given via the command-line arguments:
     - `todo.py -a priority message`: adds a message with the given integer priority
     - `todo.py -l`: prints out the messages sorted by priority in the descending order
     - `todo.py -r`: prints out the messages sorted by priority in the ascending order
     - `todo.py -d`: interactive command to delete a message (first, it prints out all the messages, then it asks what message to delete and after the user input, the specified message gets deleted)