

PROGRAMMING (CT240)

Dr M. Mc Gettrick

Time allowed: *one* hour.

Attempt *one* question. Hand up a print-out of your code. If you are unsure of (parts of) code, you may obtain some marks by writing your comments/algorithm/program layout in plain english.

1. Write a program in PYTHON that takes command line arguments and that prints out, from amongst the command line arguments, the second shortest one, along with its length (i.e. no. of characters). Include in the command line arguments the name of the program itself. *Do not use the sort method.*
2. Write a program in PYTHON that reads text from a file called `data.txt` and that calculates from that file how many times the letters a and d occur separated by one character (i.e. “axd” where x could be any character). So for example if the input file contained “The bard and his muse” , your program should return 2 (for bard and and) Run your program on the file at <http://grobner.it.nuigalway.ie/python/d1.txt> and hand up the result with your program.

Beannachtaí na Nollag ort