COMP4511 System and Kernel Programming in Linux

Lab 01 – Bridging From C++ to C

Lab task

Given a C++ program source code (my_encrypt.cpp), rewrite it as an equivalent C program (my_encrypt.c).

The program reads a text file (input.txt) containing a single line of message. Each word is separated by exactly one empty space. For each word, reverse its letters and case. For example, the first word is "The" and the encrypted word is "EHt". The last word is "kernel." and the encrypted word is ".LENREK".

You should print out the original message and the encrypted message. At the same time, the encrypted line of message should be outputted to a text file (output.txt)

Compiling a C program

You should use gcc (instead of g++) to compile your C program. The command is as follows:

```
gcc -o my_encrypt my_encrypt.c
```

Sample Output

```
csl2wk18:cspeter:104> ./my_encrypt
Original : The Linux kernel is a Unix-like computer operating system kernel.
Encrypted: EHt XUNIl LENREK SI A EKIL-XINu RETUPMOC GNITAREPO METSYS .LENREK
csl2wk18:cspeter:105> cat output.txt
EHt XUNIl LENREK SI A EKIL-XINu RETUPMOC GNITAREPO METSYS .LENREK
```