

# Homework #7 (1)

- Write an ARM assembly program to perform three tasks
  - Read a text file named “**input.txt**”
  - Transfer **lower case letters** (‘**a**’ to ‘**z**’) to **upper case letters**
    - Other characters are not changed.
  - Output the results to a text file named “**output.txt**”

# Homework #7 (2)



A little bird was flying south for the winter. It was so cold the bird froze and fell to the ground in a large field. While it was lying there, a cow came by and dropped some dung on it. As the frozen bird lay there in the pile of cow dung, it began to realize how warm it was.

A LITTLE BIRD WAS FLYING SOUTH FOR THE WINTER. IT WAS SO COLD THE BIRD FROZE AND FELL TO THE GROUND IN A LARGE FIELD. WHILE IT WAS LYING THERE, A COW CAME BY AND DROPPED SOME DUNG ON IT. AS THE FROZEN BIRD LAY THERE IN THE PILE OF COW DUNG, IT BEGAN TO REALIZE HOW WARM IT WAS.

# Homework #7 (3)

- Program should be assembled and linked by gcc (ARM cross toolchain)
- Program should be executed under **GDB ARM simulator**
- 程式中應有適當的說明（註解）
- 不可使用C library (請利用 **semihosting technique**)

# Homework #7 (4)

- You should turn in to **ECOURSE2**
  - README.txt (純文字檔)，描述你程式的內容、如何編譯程式、如何執行你的程式。
  - hw7.s (Your ARM assembly code)
  - Makefile
  - Any other files are required in your implementation
  - 你的測試檔: input.txt
  - 你程式執行之後產生的檔案: output.txt
- 請勿繳交【利用編譯器所自動產生的組合語言程式】
- 請勿抄襲
- 請將欲繳交的檔案壓縮成 <hw7\_學號.tar.xz>，上傳壓縮檔
- **Deadline: December 8 (Sunday), 2024**