

## UNIX Programming Assignment 4

Due date : 2016/11/8 23:59

Demo time: 2016/11/8 18:30~22:00

Demo room: EECS 328

Please write a tool to break a /etc/shadow line using dictionary attack. Download the dictionary file at

[https://nmsl.cs.nthu.edu.tw/images/courses/CS5432\\_2016/john.txt](https://nmsl.cs.nthu.edu.tw/images/courses/CS5432_2016/john.txt) .

Your tool will load this dictionary into memory, and tries to concatenate three words into the plaintext password candidate. Use the crypt library to find the actually password of a person. The TA will time how fast your code can break the password.

The top 10% of the student will receive 2 bonus points.

- **We have updated the dictionary file, please download the latest file online**
- Your tool, say **decrypt**, that reads the hashed password from a file, and output the decrypted password. (sample test case can be downloaded from the iLms)

Sample output:

```
$ ./decrypt <input_file>
```

```
xxxxxxxx (xxxxxxxx should be password you find)
```

- The password is composed of three random words from the given dictionary file.
- You will need to check how to get a hashed string as explained during the lecture.
- Submit your code and Makefile via iLms.