## CSS224: Assignment 1

Implement the following functions in assembly:

- 1. mod357(x) returns the value of (x % 3) + (x % 5) + (x % 7), where '%' is the modulo operator.
- 2. pow3(n) return the value of  $3^n$ . This function must return -1 when n > 30. Read http://stackoverflow.com/questions/101439 if you prefer to implement this function in a non-trivial way.
- 3. isprime(x) returns 1 when x is a prime number. It returns 0 otherwise. For more information related to the prime number, check https://en.wikipedia.org/wiki/Primality\_test.

**Deadline:** September 21, 2016; 16:00

## **Rules and Grading Scheme**

- You must compile and test your programs on css224.cholwich.net before submitting them. For example, use gcc -o test1 test1.c problem1.s to compile the program for problem 1, and use ./test1 to test the program.
- Your user name on the server is "u[student id]", and the initial password is your first name starting with a capital letter.
- Your programs must be submitted via turnin program on the server. Any other submission method will not be accepted.
- Any form of cheating will NOT be tolerated. Do not copy someone's code or let someone copy your code. I will use a plagiarism detection program to check your submitted files.
- If you have any question related to this assignment, you can contact me at cholwich at gmail.com.
- Late submission will not be accepted.