## CS 256 Quiz 4, 26 October 2017

**Problem 0.1** Write a code that prints out all the subset of size m = 3 from set  $\{1, 2, 3, ..., n-1, n\}$  for a given number n.

For example the subset of size 3 from set  $\{1, 2, 3, 4, 5\}$  are :

 $\{1, 2, 3\}, \{1, 2, 4\}, \{1, 2, 5\}, \{1, 3, 4\}, \{1, 3, 5\}, \{1, 4, 5\}, \{2, 3, 4\}, \{2, 3, 5\}, \{2, 4, 5\}, \{3, 4, 5\}.$ 

**Problem 0.2** Write a code that reads an input string S and remove all the upper level letters from it and print it in the reverse order. Example : if input is "Ab97DefZ" then your output should be : "fe79b"

Between 3,4 choose one to answer !

**Problem 0.3** Write a program that reads an integer n and prints out its binrary representation. For example if n=18 then your answer should be 10010.

**Problem 0.4** Read n points in the plane (2D plane) and find the closet pair of points (the input is n lines of x, y coordinates).