EE 4243: Computer Organization and Architecture
Project
Due Date: 4/23/2015 (for Q1)
4/27/2015 (for Q2)

Q1. Write an assembly language (MIPS) program to encrypt digits as shown below:

Input digit: 0 1 2 3 4 5 6 7 8 9
Encrypted digit: 4 6 9 5 0 3 1 8 7 2

Your program should accept a string consisting of digit and non-digit characters. The encrypted string should be displayed in which only the digits are affected. Then the user
should be queried whether he or she wants to terminate the program. If the response is either 'y' or 'Y' you should terminate the program; otherwise, you should request another input string from the keyboard.

The encryption scheme given here has the property that when you encrypt an already encrypted string, you get back the original string. Use this property to verify your program.

e.g.: James Bond 007 → James Bond 448 and vice versa.

Write a report to include:

Your approach/algorithm in designing the code.
Your code with comments.
Input /Output Screen-Shots (both Encryption and Decryption).
Conclusion.

Drop you report by Friday 4/24/2015 - 12:00 pm at the drop box placed outside Dr Lee's office (AET: 2.372).

Q2. Write a survey report on the latest MIPS 64 bit warrior class processor's architecture and features. (Font size 12, single space lines).