**CSE1007 – JAVA PROGRAMMING**

Lab Exercise on Methods

**Question 1**

Write a JAVA program to find the GCD of any two numbers. Your program should have method findGCD() that return the gcd of the two numbers.

**Question 2**

Travel Tickets Company sells tickets for airlines, tours, and other travel-related services. Because long numbers have often been entered incorrectly by agents, Travel Tickets has asked you to code a JAVA program that will indicate if a ticket number entry is invalid. Ticket numbers are 11 digits long. Ticket numbers are designed such that if you drop the last digit of the number, then divide the 10-digit number by 7, the remainder of the division will be identical to the last dropped digit. If ticket number is 10-digits, include the 11th digit or if it is 11-digit long, check for the validity. If the ticket number is any other length, your program should prompt the agent to check and re-enter the ticket number. Include a method **isValidTicket()** that return either true or false depending on the validity of the ticket.

**Question 3**

Assume that you have a list of words and you wish to find how many words are palindrome in the list. Devise a JAVA program that reads several words and displays the palindrome words and count of such words. Your program should have two methods namely **reverseString()** and **isPalindrome()**.

Hint: A word is palindrome if its reverse is same as the original.