MODULE 1: INTRODUCTION TO PROGRAMMING IN C#

FURTHER EXERCISES

Tutorial 2

1. A simple secret code is that of a 'shift cypher' in which the individual letters of a message are moved by a fixed number of places in the alphabet. For example, shifting 2 places would mean that the word 'VERY' would be encoded as 'XGTA' (the alphabet wraps round). Write a program to implement this cypher for short words or phrases. Hint: obtain individual characters and store them in a variable of type char. Get the ASCII code of the character e.g. int j = (int) letter; Convert an ASCII code back to a character e.g. char c = (char) k;

2. Design and write a program that enables the user to enter a word or phrase and then to check whether the entry is a palindrome (a word or phrase that reads the same backwards or forwards e.g. "kayak", "eye", "Able was I ere I saw Elba"). An advanced form of this program would ignore punctuation, spaces and treat upper and lower case letters as the same e.g. "Madam, I'm Adam" would be a recognized palindrome. Hint: you may find the ToUpper() or ToLower() methods useful e.g. upCaseName = myName.ToUpper();