

ITEC322 (Python Programming)
Revision Activity 1B

a) Briefly explain the following terms:

- i. Object-oriented programming
- ii. Encapsulation
- iii. Subclass
- iv. Parent class
- v. Function

b) A Python array called **level**, has four initial items; new, geek, hack, and pro.

- i. Express level and its elements in an array form.
- ii. Using the append level, add another level, guru, to the array members.
- iii. Write an expression to delete the second element from the array.
- iv. Use a standard Python method to deduce the length of the array, level.
- v. Write an expression to get the second value from the level array
- vi. Briefly explain a **dictionary** as used in Python programming. Provide an example of a dictionary.

c) A class, student, has the following properties:

firstName (String)
lastName(String)
Institution (String)
AverageScore(double)
age(int)

Create a template in Python for student class described above.

d) Write a Python program to reverse a given string.

Sample String: "decimal"

Expected Output: "lamiced"

e) Write a Python function to find the maximum of three temperature records with variable names, temp1, temp2, and temp3.

f) i. Briefly explain and illustrate **Dictionaries** as used in Python program.

g) Write a Python function that checks whether a passed string is a palindrome or not. (A palindrome reads same when spelt backward or forward. Eg. Madam)