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**CMP 321 - Programming languages Laboratory**

**Lab 2 – Python String functions**

**Objectives**

* Make use of Python string functions and features

**Please explore and make use of Python features where possible. Code that does not follow this note will be penalized.**

**Exercise 1**

1. Given a list of full names, print acronyms for each by combining the first letter of the first name and the last name (ignoring middle names, if any). Example:

nameList = ["Abdulla mhd zayed", "rashid asif", "john elton rowan smith", "Ali Rami"]

printed acronyms: AZ, RA, JS, AR.

1. Given a string, such as "Welcome to UAE. uae are awesome, right?", find all occurrences of "UAE" in that string (ignoring case).
2. Determine how many elements in a given list that are within a specified range (using a condition of the form: min <= x <= max).

**Exercise 2**

1. Print a given integer, such as 314159265358979, in the following (readable) format:

3\_141\_592\_653\_589\_793

1. Write a function that takes as parameters a phone number and a (country-specific) phone number format and returns a string that represents the formatted phone number.

Examples:

UAE: phoneNumber = 971506455734, phoneFormat = "3+2+3+4"

formatted output: 971-50-645-5734

France: phoneNumber = 33109758351, phoneFormat = "2+1+2+2+2+2"

formatted output: 33-1-09-75-83-51

India: phoneNumber = 918966428361, phoneFormat = "2+3+7"

formatted output: 91-896-6428361

**Exercise 3**

A text file is given that contains a number of emails. Write a Python script that will list out all the email addresses used and, for each address, check if it belongs to any of the following domains: com, edu, gov, org.

Sample output:

attymarkhanni@gmail.com : valid

whitehead.ladawn@tms.co.uk : INVALID

dennis.dimartino@sil.gov.it : INVALID

polo.dawn@epa.gov : valid

Clarizio.Richard@ati.name : INVALID

ahmed.ali@ws.alt.epa.org : valid

jfkennedy@cee.nyu.edu : valid