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**CMP 321 - Programming languages Laboratory**

**Lab 2 – Python String functions**

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**Question 1**

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

acList = []

finalList = []

for name in nameList:

w = name.split()

acList.append((w[0][0],w[-1][0]))

for acronymn in acList:

finalList.append(''.join(acronymn).upper())

print(finalList)

msg = "Welcome to UAE. uae are awesome, right?"

indexList = []

print("Count: ")

print(msg.upper().count("UAE"))

curr = 0;

while((msg.upper().find("UAE") != -1)):

indexList.append(msg.upper().find("UAE") + curr)

curr += msg.upper().find("UAE") + 3

msg = msg[msg.upper().find("UAE")+3:]

print("Indices of UAE: ")

print(indexList)

def count\_range(list, min, max):

counter = 0

for x in list:

if min <= x <= max:

counter += 1

return counter

numlist = [1,2,3,4,5,6,7,8,9,10]

print(count\_range(numlist, 3, 9))

**Question 2**

bigNum = 1234567

numString = str(bigNum)

print(numString[-3:]) #the last 3 elements

numOfDigits = len(numString)

numOfHyphens = numOfDigits / 3

myList = []

if numOfDigits % 3 != 0:

myList.append(numString[0:numOfDigits%3])

for i in range(numOfHyphens):

myList.append(numString[numOfDigits%3 + (3\*i): numOfDigits%3 + (3\*i+3)])

print(myList)

print("\_".join(myList))

def phoneFormatter(number, format):

numbers = []

c = 0

for i in format.split("+"):

numbers.append(number[c: c + int(i)])

c = c + int(i)

return '-'.join(numbers)

print(phoneFormatter("971506455734","3+2+3+4"))

print(phoneFormatter("33109758351","2+1+2+2+2+2"))

print(phoneFormatter("918966428361","2+3+7"))

**Question 3**

file1 = open('email.txt', 'r')

lines = file1.read()

emailAdds = []

endings = ['com', 'edu', 'gov', 'org']

for string in lines.split():

if '@' in string:

emailAdds.append(string)

for email in emailAdds:

email = email.replace(";","")

if email[-3:] in endings:

print(email + " : valid")

else:

print(email + " : INVALID")

