### **ANKARA UNIVERSITY**

### **COM101B**

### Fall 2017

### LAB5-Quiz

Date: 24/11/2017 Group 2

**Duration: 90 minutes** 

Write a program that takes a character sequence and a 1-digit offset (number) sequence. Your task is to determine a new character sequence according to the given specifications. You will be encoding your character sequence into some numeric values and then selecting the ones that satisfy a given criteria.

You will first convert the letters to numeric values according to this simple rule: 'a' is 1, 'b' is 2, 'c' is 3 and so on..Then, you will modify each number by adding its corresponding offset in the sequence. Each number has a 1-digit offset in the sequence. In the end, you will print the characters that are encoded with an even number. Please look at the given example:

For example: Assume that the input is given as:

>bacefd 638532

- \*Your program will re-arrange the caharacter data as: 213564 such that each number is encoded according to the rule given above: b:2, a:1, c:3, e:5, f:6, d:4.
- \*You will be adding the offsets 6,3,8,5,3,2 in the given order to your numeric representation of the input data: 2+6, 1+3, 3+8, 5+5, 6+3, 4+2.
- \* Hence your encoding will be: 8-4-11-10-9-6. That correspond to 8 for b, 4 for a, 11 for c, 10 for e, 9 for f and 6 for d.
- \*Print the character sequence from left to right order that are encoded with even numbers. In this example, {b, a, e, d} have even encodings, hence the output character sequence will be:

>baed

- \*You can assume that the character sequence will not exceed 50 characters.
- \*The character sequence will include only the small letters: {a,b,...,z}
- \*You will assume that <u>for each caharacter there will be an offset number</u> in the input.

# **Input Format:**

<character sequence without space>[space]<offset sequence>

# **Ouput format:**

<output character sequence without space>\n

**Submission:** Your source code will be named using your student ID: <student-id>.c

Ex: if your id is 1123456 than you should name your source code like this: 1123456.c

Please test your program thoroughly before submission.

Good luck <sup>©</sup>