SECOND EVALUATION

18.07.2022 **Time: 1.30 hrs.**

1. Sort first half in ascending and second half in descending order.

Input:
8
2 4 7 9 3 1 6 8
Output:
1 2 3 4 9 8 7 6

Input:
6
1 2 3 4 5 6
Output:
1 2 3 6 5 4

2. Print the below pattern

Input:
4
Output:
1
2*3
4*5*6
7*8*9*10
7*8*9*10
4*5*6
2*3
1

3. Write a program that will take one string as input. The program will then remove vowels a, e, i, o, and u (in lower or upper case) from the string. If there are two or more vowels that occur together then the program shall ignore all of those vowels.

Example 1

- Input: Cat
- Output: Ct

Example 2

- Input: Compuuter
- Output: Cmpuutr

4. Write a program that will take a string as input. The program will then determine whether each left parenthesis ‘(’ has a matching right parenthesis ‘)’ and also all the ‘)’ has a consecutive ‘(‘. If so, the program will print 0 else the program will print 1.

Example 1

- Input: HELLO AND (WELCOME (TO THE) TCEA (CONTEST)TODAY)IS (SATURDAY())
- Output: 0

- Input: (9*(7-2)*(1*5)
- Output: 0

5. Write a Java program that prints the numbers from 1 to 50. But for multiples of three print “Fizz” instead of the number and for the multiples of five print “Buzz”. For numbers which are multiples of both three and five print “FizzBuzz”

6. Your task is to create the class *Add* and the required methods so that the code prints the *sum of the numbers* passed to the function *add*.
Note: Your *add* method in the *Add* class must print the *sum* as given in the *Sample Output*

Sample Input
1
2
3
4
5
6
Sample Output
1+2=3
1+2+3=6
1+2+3+4+5=15
1+2+3+4+5+6=21

7. Given an input string and a dictionary of words, find out if the input string can be segmented into a space-separated sequence of dictionary words. See following examples for more details. This is a famous Google interview question, also being asked by many other companies now a days.

Consider the following dictionary
{ i, like, sam, sung, samsung, mobile, ice, cream, icecream, man, go, mango}

Input: ilike
Output: Yes
The string can be segmented as "i like".
Input: ilikesamsung
Output: Yes
The string can be segmented as "i like samsung" or
"i like sam sung".