Evaluation Test No 1

Date : 03.10.2022 **Time : 2.30 hr**

1) Check if an array is formed by consecutive integers

Input {-1,5,4,2,0,3,1}

Output The array contains consecutive integers from -1 to 5.

Input {4,2,4,3,1}

Output The array does not contain consecutive integers as element 4 is repeated.

2) Given the number of Covid Cases Admitted in the hospital from Day 1 to Day N. Hospital takes K days to treat a patient, cure them completely and discharge. Find the Maximum number of cases treated by the hospital in a single day.

Input: Cases ={1, 2, 3, 1, 4, 5, 2, 3, 6 }

K = 3 (i.e the hospital takes 3 days to treat a patient)

Output: 11.

Explanation:

On Day 1=> 1 Patient
On Day 2=> 3 Patients
On Day 3=> 6 Patients
On Day 4=> 6 Patients
On Day 5=> 8 Patients
On Day 6=> 10 Patients
On Day 7=> 11 Patients
On Day 8=> 10 Patients
On Day 9=> 11 Patients
On Day 10=> 9 Patients
On Day 11=> 6 Patients
On Day 12=> The Hospital will be Corona Free.
So the Hospital has treated 11 Patients on Day 7 & Day 9.

3) Given an integer array. Find a sub array having the given sum in the given array

Input: A[] ={2, 6, 0, 9, 7, 3, 1, 4, 1, 10} target = 15

Output: {6, 0, 9}

Input: A[] ={0, 5, -7, 1, -4, 7, 6, 1, 4, 1, 10} target = -3

Output: {1, -4}

4) Write a Java program to create and display unique three-digit number using 1, 2, 3, 4. Also count how many three-digit numbers are there.

Expected Output

123
124
...

431
432

Total number of the three-digit-number is 24

5) 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

6) 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