LAB#08 EXERCISES

INSTRUCTIONS:
NOTE: Violation of any of the following instructions may lead to the cancellation of your submission.

1) Create a folder and name it by your student id (K21-1234).
2) Paste the .c (Save as type) file for each question with the names such as Task1.c, Task2.c and so on into that folder.

Task 01: Write a program that reads the 10 numbers from user and store these numbers into an array of same size. You program should provide a searching mechanism in such a way that how many times a particular number occurred and then print it on screen. If number is not in array, then program should display a message "number not found".

Task 02:
Write a program by declaring an array for six elements. Use for loop to assign the given set {3.14,3.24,3.34,3.44,3.54} numbers to them. Display your stored numbers in descending order as well.
Note: Use nested for loop.

Task 03:
Write a program to find the sum of all negative numbers and the sum of all positive numbers in an array. Also, find the sum of the negative number and positive number.

Task 04:

Sir. Shahzad ask you to write you a program which can help him in storing your quiz marks for pass students within range [5-10] will be stored, consider there are 10 students registered in **a section.** He wants an another array of same size where marks for failed students within range [0-5] are stored. Write a program for the given scenario. You program should exit if user enters -1 and will display the marks entered along with average of each array.

 Note: Use Loops, 1D-Array and decision statement combination

Task 05:

Write a C program to count the positive, negative and zeros in any given array.

Task 06:

 Write a program which ask the user to input a number as input greater than or equal to four digits. Then find the sum of entered number.

Task 07:

Write a C program to find the sum of an array element and count of even and odd numbers in the given list of N numbers.

```
Enter array size [1-100]: 5
Enter 5 elements: 1  2  3  4  5
Total Sum: 15
Even numbers: 2
Odd numbers = 3
```

Task 08:

Consider the equation 3a + 7b -5c = 10. Where a, b, c are integers and is within range (-10,10). Write a program which can find the integer root for given problem as follows. Note: Use Nested for loop only

```
D:\Fall2021\CL1002\CodingStuff\Week-08\Tasks\Task-08.exe
Solution:  -9  1  -6
Solution:  -9  6  1
Solution:  -8  2  -4
Solution:  -8  7  3
Solution:  -7  -2  -9
Solution:  -7  3  -2
Solution:  -7  8  5
Solution:  -6  -1  -7
Solution:  -6  4  0
Solution:  -6  9  7
Solution:  -5  0  -5
Solution:  -5  5  2
Solution:  -5  10  9
Solution:  -4  -4  -10
Solution:  -4  1  -3
Solution:  -4  6  4
Solution:  -3  -3  -8
Solution:  -3  2  -1
Solution:  -3  7  6
Solution:  -2  -2  -6
Solution:  -2  3  1
Solution:  -2  8  8
Solution:  -1  -1  -4
Solution:  -1  4  3
Solution:  -1  9  10
Solution:  0  -5  -9
Solution:  0  0  -2
Solution:  0  5  5
Solution:  1  -4  -7
Solution:  1  1  0
Solution:  1  6  7
Solution:  2  -3  -5
Solution:  2  2  2
Solution:  2  7  9
Solution:  3  -7  -10
Solution:  3  -2  -3
Solution:  3  3  4
Solution:  4  -6  -8
Solution:  4  -1  -1
Solution:  4  4  6
Solution:  5  -5  -6
Solution:  5  0  1
```

Task 09:

Print the following patterns using nested for loop:

```
Enter number of rows: 5
    1
    2    3
    4    5    6
    7    8    9    10
   11   12   13   14   15
```

```
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* *

* * *

* * * *

* * * * *
```

```
Enter number of rows: 5

11111

22222

33333

44444

55555
```