Department of Statistics & Computer Science, University of Kelaniya
ACADEMIC YEAR – 2020/2021
COSC / COST 11023 – Fundamentals of Programming
Lab Session – 08

Throughout this lab session, you will learn more about arrays in C.

1. Write a C program to create the following integer array.

```
int values[10] = { 2, 5, 8, 13, 14, 11, 74, 65, 34, 13};
```

   Then, find the maximum and the minimum values stored in the array.

Upload the completed program into lab 08 – Program 01 folder.

2. Write a C program to find how many odd numbers are in the following array.

```
int values[10] = { 2, 5, 8, 13, 14, 11, 74, 65, 34, 13};
```

Upload the completed program into lab 08 – Program 02 folder.

3. Write a C program to create the following char array.

```
char word[10]={'a', 'v', 's', 'j', 'a', 'g', 't', 'a', 'b', 'c'};
```

   Then, find how many 'a' characters in the word array.

Upload the completed program into lab 08 – Program 03 folder.

4. Write a program in C to copy the elements of one array into another array. For example, create the following two arrays:

```
int original[5] = {45, 68, 78, 85, 90};
int duplicate[5];
```

   After the program execution, duplicate array should contain the original array values.

Upload the completed program into lab 08 – Program 04 folder.

5. Write a C program to read 5 numbers from the user. The numbers read should be stored in an array of integer type. Set the maximum capacity of this array to 5.
   - Then the program displays all the values in the array, one value per line
   - Next, the program displays all the values in the array in reverse order, i.e., the last values in the array is displayed first, and the first value in the array is displayed last.

Here is the example output of the program:

```
The list of values are:
49
53
91
100
82

The list of values printed in reverse are:
82
100
91
53
49
```

Upload the completed program into lab 08 – Program 05 folder.