

BSc (Hons) in Information Technology Year 1

Lab Sheet 5

IT1010 – Introduction to Programming

Semester 1, 2020

Objectives:

At the end of the class the students should be able to:

• Use arrays in C programs.

Exercise 1:

Write a C program to the following:

- a) Create a single-subscripted array of size 10;
- b) Initialize the array with 25, 32, 45, 2, 13, 9, 6, 10, 17, 4.
- c) Input a **search key (number)** from the key board and display the location within the array, if the search key is found. If not display "Value not found".

Exercise 2:

Write a C program to multiply the content of array A and B and store it in a new array called C.

```
int A[5] = \{ 10, 20, 30, 40, 50 \};
int B[5] = \{ 34, 67, 12, 89, 12 \};
```

Exercise 3:

A company pays its employees a salary between \$200 to \$1500 .Write a C program (using arrays of counters) that determine how many of the employees earned salaries in each of the following ranges (assume that each employee's salary is truncated to an integer amount). The program should stop entering the salaries, when the user input -1 a salary.

- a) \$200 \$299
- b) \$300 \$399
- c) \$400 \$499
- d) \$500 \$599
- e) \$600 \$699
- f) \$700 \$799
- g) \$800 \$899
- h) \$900 \$999
- i) 1000 and above