**TRINITY INTERNATIONAL SS & COLLEGE**

**Dillibazar Height, Kathmandu, Nepal**

****

**LAB WORK #4: C-Programming**

**(COMPUTER SCIENCE)**

**SUBMITTED BY: SUBMITTED TO:**

**NAME: Prashim Timsina**

**GRADE: XI (MC1)**

**DATE : [2079/11/12] PRAVEEN KOIRALA**

**Faculty of Computer Science**

**KATHMANDU, NEPAL**

**2022 Table of Contents**

S. No. Page No.

1. Table of Contents 1

2. Objectives 2

3. Theoretical Background 2

3.1 C-Programming

3.1.1 Array

3.1.2 Syntax of 1-D and 2-D Array

3.1.3 Initialization of 1-D and 2-D Array

4. Work Done

Page: 1

**2. Objective**

The main objectives of the lab work are as follows:

1. To Understand the concept of array (single dimension and multi-dimensional array).
2. To perform sorting of array.
3. To perform matrix operation using array (sum, transpose).

**3. Theoretical Background**

Array: Array in C can be defined as a method of clubbing multiple entities of similar type into a larger group. These entities or elements can be of int, float, char, or double data type or can be of user-defined data types too like structures.

Syntax of Single Dimensional array:

datatype array\_name[size];

Syntax of Multi-Dimensional array:

data\_type array\_name[row][column];

Initialization of 1-D Array:

int arr[] = {4, 3, 1, 2};

Initialization of 2-D Array:

int arr[4][3] = {{2, 3, 1}, {19, 12, 7}, {10, 9, 8}, {3, 11, 5}};

Page: 2

|  |
| --- |
| Source Code |
|  |
| Source Code |
|  |
| Source Code |
|  |
| Source Code |
|  |
| Source Code |
|  |
| Source Code |
|  |
| Source Code |
|  |
| Source Code |
|  |
| Source Code |
|  |
| Source Code |
|  |
| Source Code |
|  |