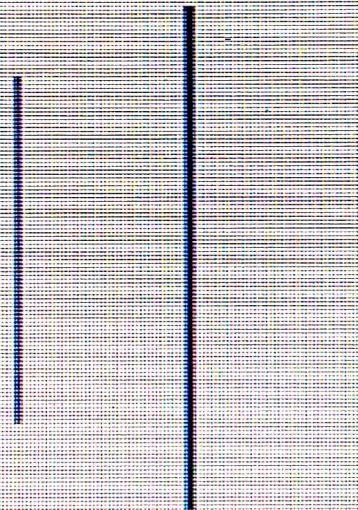


**INSTITUTE OF ENGINEERING  
ADVANCED COLLEGE OF ENGINEERING  
& MANAGEMENT  
KUPONDOLE, LATIPUR  
(AFFILIATED TO TRIBHUVAN UNIVERSITY)**



**LAB REPORT**

**LAB NO.: 6**

**SUBJECT: C PROGRAMMING**

**SUBMITTED BY:**

**NAME: ASHWANI KUMAR CHAUDHARY  
ROLL NO.: 019  
DATE: 2078/03/**

**SUBMITTED TO:**

**DEPARTMENT OF  
COMPUTER &  
ELECTRONICS**



## TITLE : Array handling techniques in C-program

### Objective:-

To understand programming using dimension of Array.

### Theory:-

Array is a collection of variables belonging to the same data type. You can store group of data of same data type in an array.

### Types of Array:-

#### (a) Single dimension Array:-

In C-programming language, single dimension array are used to store list of values of some datatype. In the other words, single dimensional arrays are used to store a row of values. In single dimensional array, data is stored in linear form. Single dimensional array are also called as one dimensional array, linear Array or simply 1.D array. Single dimensional array can be declared as: Syntax: data-type array-name [array-size]. And single dimensional array can be initialized as data-type array-name [size] = { value 1, value 2, --- 3 }.

## b) Multi - Dimensional Array.

An Array of array is called multi dimensional array. In simple words, array created with more than one dimension (size). is called multi-dimensional array. Multi dimensional array can be of two dimensional array or four dimensional array or more. --

Most popular & commonly used multi-dimensional array is two dimensional array. The 2-D array is used to store data in the form of table we also used 2D-array to create mathematical matrix. Two dimension array can be declared as.

Syntax: data-type, array-name [row-size]  
[column-size];

Two dimensional array can be initialized as;

Syntax: data-type, array-name [rows][column]  
= { {r, c, value, r, c, value}, {r<sub>2</sub>c<sub>1</sub>, r<sub>2</sub>c<sub>2</sub>, --- } }