

**NATIONAL INSTITUTE OF TECHNOLOGY CALICUT**  
**Department of Computer Science and Engineering**  
**Winter Semester 2017-2018**

**CS2093 Hardware Laboratory**

**Assignment set 2: Integer Array Handling**

## **Instructions**

- *All the assignments should be submitted through Eduserver.*
- *Pen drives are not permitted inside the lab.*
- *Practice problems will not be evaluated.*

## **Practice Questions.**

1. Write a program to read two 16 bit numbers add them and print the result.
2. Write a Program to calculate Sum & Average of an Array.
3. Write a program to find the most repeated element in an array.
4. Write a program to search for a number in an array of numbers using binary search and linear search.
5. Write a program to accept 10 numbers into an array and find the largest and smallest number.
6. Write a program to read two matrices and find their product and sum.
7. Write a program to read a matrix and find the transpose.

## **Assignment Problems.**

1. Enter two numbers 'a' and 'b' and identify which are the numbers in array is divisible by both 'a' and 'b'. Length of array is 'n'.
2. Write a program to identify number of even and number of odd numbers in an array of length n.
3. Write a program to sort an array of numbers in descending order using bubble sort.
4. Write a program to interchange diagonals of a matrix.
5. Write a program to read a matrix and rotate it by 90 degree.