

BASIC PROGRAMMING

LABWORK 5: Array and String

Exercise 1: Write a C program to find the minimum and maximum number in a given series of n numbers stored in a static or dynamic (from the keyboard) array.

Exercise 2: Write a C program to enter a positive integer number n and calculate the sum of even and odd numbers from 1 to n.

Exercise 3: Write a C program to sort an array of n elements in an increasing order (n is constant) by three different methods: bubble sort, insertion sort and selection sort.

Exercise 4: Enter an array of size n, (n is input from the keyboard), then calculate the sum of all the array elements.

Exercise 5: Enter a matrix **A** of size n, (n is input from the keyboard), let's calculate:

- The sum of all the matrix **A**'s elements
- Print the transposed matrix of **A**
- (option)The Determinant of the matrix **A**
- (option) The inversed matrix of **A**

Exercise 6: Enter a string from the keyboard, let's print the string in reverse.

Exercise 7: Enter a string from the keyboard, let's print out the number of the character 'a' in the string and their orders in the string.

Exercise 8: Enter a string and a character x from the keyboard and delete all the characters x in the string.

Note: To save time, the lecturer can tutor the exercises 3, 5 at the end!