

### Array and Functions

- 1- Write a program to find the largest element in an array of 100 elements.
- 2- Write a program to compute the sum of the elements of an array of 50 elements
- 3- Write a program to count the even numbers in an array of 30 elements..
- 4- Write a program to count the positive, negative and zeros in an array of 40 elements
- 5- Write a program to change the values of the negative elements in an array of 1 elements to be positive.

For example: if  $A = \{2, -5, -3, -4, 10, 9, 8, -7, 6, -11\}$  then the program should change it to be  $= \{2, 5, 3, 4, 10, 9, 8, 7, 6, 11\}$

- 6- Write a C++ program to search for a given value  $x$  in an array  $A$  of  $n$  elements.
- 7- Write a C++ program to insert a given value  $x$  in a sorted array  $A$  of  $n$  elements.
- 8- Write a C++ program to reverse the elements stored in an array  $A$ .  
If  $A = \{1, 5, 7, 9\}$  then  $A$  will be  $\{9, 7, 5, 1\}$ .
- 9- Write a function named "myave" that takes two numbers and returns the average. Write the main function to call the function.
- 10- Write a function named "lcomp\_larg" that takes two numbers and returns the largest. Write the main function to call the function.
- 11- Write a function named "printlist" that takes two numbers and prints the numbers between them. . Write the main function to call the function.
- 12- Write a function named "myrev" that takes two numbers and reverses them. Write the main function to call the function.
- 13- Write a function named "myfactors" that takes a number and prints its factors. Write the main function to call the function.
- 14- Write a function named "arraysum" that takes an array of  $n$  elements and returns the sum of the elements of the array . Write the main function to call the function.