National College of Computer Studies (NCCS)

BIM Second Semester: Structure programming lab sheet 5

ARRAY : PART I [1-D ARRAY]

1. WAP to take one dimensional array of n size and display each index individually.
2. Write a C program to print all negative elements in an array.
3. Write a program in C to store elements in an array and print it.
4. Write a program in C to find the sum of all elements of the array
5. Write a C program to count total number of negative elements in an array.
6. Write a program in C to read n number of values in an array and display it in reverse order
7. Write a program in C to copy the elements of one array into another array
8. WAP to find the smallest and the largest element in the array of size 10.
9. WAP to find the second largest element in the array.
10. WAP to search the number inputted by user in an array.
11. WAP to sort the array in ascending and descending order.
12. Write a program in C to separate odd and even integers in separate arrays
13. WAP to take 1-dimensional array of n size and count the even and odd number in the array and display.
14. WAP to read "n" number of person's age in an array and print minimum, maximum and average age.

PART II [2-D ARRAY]

1. WAP to take input 3*3 matrix and display it.
2. WAP to take input 3*3 matrix and display the sum of each element of matrix.
3. WAP to take input 3*3 matrixes and create a new matrix by replacing all the elements of previous matrix by 15 if the element of previous matrix is less than 5.
4. Write two 3*4 matrix A and B in your program and print them. And obtain matrix C=A-B and print.
5. Write two 3*4 matrix A and B in your program and print them. And obtain matrix C=A+B and print.
6. Write two 3*4 matrix A and B in your program and print them. And obtain matrix C=A*B and print.
7. Write two 3*4 matrix A and B in your program and print them. And obtain matrix C=2*(A+B) and print.
8. Write two 3*4 matrix A and B in your program and print them. And obtain matrix C=5*(A-B) and print.
9. WAP to take two 1- dimensional array of size n and m and merge them into a single array with size n + m. And display them.
10. WAP to read two 2-D Array, multiply them and print the result.

PART III ARRAY AND FUNCTIONS

1. WAP to read array of 5 numbers and display it. Define ***read()*** and ***display()*** functions for the process.
2. WAP to read array of 5 numbers and display largest and smallest number. Define ***read()*** function to read numbers, ***largest()*** to find the largest and ***smallest()*** to find the smallest number.
3. WAP to read two arrays, add two arrays and store the result in third array and display the array. Define **read()** to read data, ***sum()*** to add the array elements and ***display()*** to display the final result.

Compiled by: Ujjwol Shakya

National College of Computer Studies (NCCS)

BIM Second Semester: Structure programming lab sheet 5

4. WAP to read an array & sort them in ascending and descending order.
5. WAP to read age of 'n' student & display the 2nd lowest age.
6. WAP to read & display 2-D Array of size (m x n).
7. WAP to read 2-D Array. Add, Subtract & print it using function. Also include non-additional condition.
8. WAP to read two matrices, multiply them and stored it in 3rd array and display them. Also include non-multiplication condition.