Cyber Security Center

Logic Development Program

C# Collections

[N: B: Must use Exception Handle in each program]

SL	Problems
1.	Write a program in C# Sharp to store elements in an array and print it. Go to the editor Test Data: Input 10 elements in the array: element - 0: 1 element - 1: 1 element - 2: 2 ..... Expected Output: Elements in array are: 1 1 2 3 4 5 6 7 8 9
2.	Write a program in C# Sharp to read n number of values in an array and display it in reverse order. Test Data: Input the number of elements to store in the array :3 Input 3 number of elements in the array: element - 0: 2 element - 1: 5 element - 2: 7 Expected Output: The values store into the array are: 2 5 7 The values store into the array in reverse are: 7 5 2
3.	Write a program in C# Sharp to find the sum of all elements of the array. Test Data: Input the number of elements to be stored in the array :3 Input 3 elements in the array: element - 0: 2 element - 1: 5 element - 2: 8 Expected Output: Sum of all elements stored in the array is: 15
4.	Write a program in C# Sharp to copy the elements one array into another array. Test Data: Input the number of elements to be stored in the array :3 Input 3 elements in the array: element - 0: 15 element - 1: 10 element - 2: 12

	Expected Output: The elements stored in the first array are: 15 10 12 The elements copied into the second array are: 15 10 12
5.	Write a program in C# Sharp to count a total number of duplicate elements in an array. Test Data: Input the number of elements to be stored in the array :3 Input 3 elements in the array: element - 0: 5 element - 1: 1 element - 2: 1 Expected Output: Total number of duplicate elements found in the array is: 1
6.	Write a program in C# Sharp to print all unique elements in an array. Test Data: Input the number of elements to be stored in the array :3 Input 3 elements in the array: element - 0: 1 element - 1: 5 element - 2: 1 Expected Output: The unique elements found in the array are: 5
7.	Write a program in C# Sharp to count the frequency of each element of an array. Test Data: Input the number of elements to be stored in the array :3 Input 3 elements in the array: element - 0: 25 element - 1: 12 element - 2: 43 Expected Output: Frequency of all elements of array: 25 occurs 1 time 12 occurs 1 time 43 occurs 1 time
8.	Write a program in C# Sharp to find maximum and minimum element in an array. Test Data: Input the number of elements to be stored in the array :3 Input 3 elements in the array: element - 0: 45 element - 1: 25 element - 2: 21 Expected Output: Maximum element is: 45 Minimum element is: 21

9.	Write a program in C# Sharp to separate odd and even integers in separate arrays. Go to the editor Test Data: Input the number of elements to be stored in the array :5 Input 5 elements in the array: element - 0: 25 element - 1: 47 element - 2: 42 element - 3: 56 element - 4: 32 Expected Output: The Even elements are: 42 56 32 The Odd elements are: 25 47
10.	Write a program in C# Sharp to delete an element at desired position from a **list**. Test Data: Input the size of **list**: 5 Input 5 elements in the array in ascending order: element - 0: 1 element - 1: 2 element - 2: 3 element - 3: 4 element - 4: 5 Input the position where to delete: 3 Expected Output: The new list is: 1 2 4 5