

OOP Lab3

- 1- TRY ALL WHAT YOU HAVE TAKEN IN THE LECTURES
- 2- Receive size for one Dim Array of integer from user then reserve it , fill it using **FillArray**, then display it using **DisplayArray** function , then display it's Summation using **SumArray** function and get odd numbers from it using **GetOdd** and get even ones using **GetEven** and also get Max number using **GetMax** function and get Min using **GetMin** function then get Average using **GetAvg** function .

- 3- Receive two dimensions from user and create two dim array using received values then calculate **summation for every row** and **average for every column**

NB: to complete this task you have to create **FillTwoDimArray** function , **GetRowSummation** function and **GetAvgColumns** function

- 4- Create Selection Menu for the previous task (task 3)

- 1) Enter Dimensions
- 2) FillArray
- 3) DisplayArray
- 4) Display Rows Summations
- 5) Display Columns Average
- 6) Exit

- 5- Write c# program to concat two arrays one dimension into new array

Ex: int[] arr1={1,2,3,4} ,
int[] arr2={20,30,40,50} ,
int[] result={1,2,3,4,20,30,40,50}

NB: create your function witch will concat two arrays (receive two arrays as a parameters) and return array as a result

- 6- Write a program in C# Sharp to count the repeating of each element of an array.

Test Data :

arr- 0 : 1

arr - 1 : 2

arr- 2 : 1

Expected Output:

Repeating of all elements of Array:

1 occurs 2 times

2 occurs 1 times

- 7- Receive one dim array of it with size 10 , all values must be unique , create **CheckUnique** Function to check uniqueness for user input , then display it
- 8- Create function to calculate power of value for base value ,
Ex: **GetPower**(2,3) => will return 8 (base 2 power to 3)
Ex2:**GetPower**(4,2)=>will return 16 (base 4 power to 2)