

In-Lab Task # 13.1 (Initializing Array)

Write a C++ Program, which declares:

- Integer type Array of size '6'. Initialize each index of array with '12' at Time of Declaration.
- Double type Array of size '5'. Initialize each index of array with '0.5' at Time of Declaration.
- Char Type Array of size '4'. Initialize each index of array with 'a' at Time of Declaration.

In-Lab Task # 13.2 (Initializing Array)

Edit In-Lab Task # (12.1). Ask from user for values to be stored in Arrays.

```
"Integer Type Array"
Enter Value of Integer Type Array at Location 0 : 8
Enter Value of Integer Type Array at Location 1 : 56
Enter Value of Integer Type Array at Location 2 : 98
Enter Value of Integer Type Array at Location 3 : 448
Enter Value of Integer Type Array at Location 4 : 65
Enter Value of Integer Type Array at Location 5 : 2235

"Double Type Array"
Enter Value of Double Type Array at Location 0 : 2.5
Enter Value of Double Type Array at Location 1 : 6.5
Enter Value of Double Type Array at Location 2 : 23.0
Enter Value of Double Type Array at Location 3 : 98.3
Enter Value of Double Type Array at Location 4 : 65.9

"Character Type Array"
Enter Value of Character Type Array at Location 0 : a
Enter Value of Character Type Array at Location 1 : b
Enter Value of Character Type Array at Location 2 : c
Enter Value of Character Type Array at Location 3 : d
```

In-Lab Task # 13.3 (Printing Value from Array)

Edit In-Lab Task (12.2), Print values stored in Array.

```
"Integer Type Array"
Value of Integer Type Array at Location: 0 is: 12
Value of Integer Type Array at Location: 1 is: 12
Value of Integer Type Array at Location: 2 is: 12
Value of Integer Type Array at Location: 3 is: 12
Value of Integer Type Array at Location: 4 is: 12
Value of Integer Type Array at Location: 5 is: 12

"Double Type Array"
Value of Double Type Array at Location: 0 is: 0.5
Value of Double Type Array at Location: 1 is: 0.5
Value of Double Type Array at Location: 2 is: 0.5
Value of Double Type Array at Location: 3 is: 0.5
Value of Double Type Array at Location: 4 is: 0.5

"Character Type Array"
Value of Character Type Array at Location: 0 is: a
Value of Character Type Array at Location: 1 is: a
Value of Character Type Array at Location: 2 is: a
Value of Character Type Array at Location: 3 is: a
```

In-Lab Task # 13.4 (Display, Average, Max, Min of Array)

- Now Traverse each type of array in forward direction and display all the elements.
- Now Traverse each type of array in backward direction and display all the elements.
- Now Traverse each type of array in forward direction and display all the elements located at even index locations.

- Now Traverse each type of array in forward direction and display all the elements located at odd index locations.
- Write a C++ Program, which asks user for five integer values. Store the values in Integer Array. Calculate Average, Maximum Value, Minimum Value from Array.

In-Lab task # 13.5 **(2D arrays initialization)**

Write a C++ program to initialize a 10x10 double type array with 0 and display it.

In-Lab task # 13.6 **(Storing and Printing Values Using For LOOP in 2D Array)**

Write a C++ program to declare a 5x5 integer type array, user will enter data to store in each element. Output of program will be like:

```
Please enter values for 5 rows and 5
columns.
Enter Values for row: 0
1
2
3
4
5
Enter Values for row: 1
1
2
3
4
5
Enter Values for row: 2
.....
Enter Values for row: 3
.....
Enter Values for row: 4
....
Your stored data is:
1 2 3 4 5
1 2 3 4 5
1 2 3 4 5
1 2 3 4 5
1 2 3 4 5
Press any key to continue_
```

In-Lab task # 13.7 **(Maximum and Minimum values using For LOOP in 2D array)**

Edit In-lab task 11.6. Search the Maximum and Minimum values and display them with their Location.

In-Lab task # 13.8

Write a C++ program to declare a 5x2 integer type array and store following values in it using for loops

1	2
3	4
5	6
7	8
9	10

Print that value on screen.

In-Lab task # 13.9

Write a C++ program to print the array declared in task 12.8 in row major order.

1	2
3	4
5	6
7	8
9	10

Print that value on screen.

In-Lab task # 13.10

Write a C++ program to print the array declared in task 12.8 in column major order:

1	3	5	7	9
2	4	6	8	10

In-Lab task # 13.11

Write a C++ program to print the array declared in task 12.8 (using for loops) as following:

2	4	6	8	10
1	3	5	7	9

Write a C++ program to print the array declared in task 12.8 (using for loops) as following.

2	1
4	3
6	5
8	7
10	9

Print that value on screen.

In-Lab task # 13.12

Write a C++ program to declare a 5x5 integer type array and store values by taking input from user. Ask user to enter the number you want to search and display the location of that number in the form of row and column number.