1. Write a program in C to store elements in an array and print it.

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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 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:
257
The values store into the array in reverse are:
752
3. Write a program in C 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 to copy the elements of one array into another array.

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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 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 to print all unique elements in an array.
Test Data:
Print all unique elements of an array:
_____
Input the number of elements to be stored in the array: 4
Input 4 elements in the array:
element - 0:3
element - 1:2
element - 2:2
element - 3:5
```

Expected Output:

The unique elements found in the array are:

35

7. Write a program in C 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:

The frequency of all elements of an array:

25 occurs 1 times 12 occurs 1 times

43 occurs 1 times

8.Write a program in C to separate odd and even integers in separate arrays.

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

9. Write a program in C to sort elements of array in ascending order.

Test Data:

Input the size of array: 5

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Input 5 elements in the array:
element - 0:2
element - 1:7
element - 2:4
element - 3:5
element - 4:9
Expected Output:
Elements of array in sorted ascending order:
24579
10. Write a program in C to find the second largest element in an array.
 Test Data:
Input the size of array: 5
Input 5 elements in the array:
element - 0:2
element - 1:9
element - 2:1
element - 3:4
element - 4:6
Expected Output:
The Second largest element in the array is: 6
11. Write a program in C for subtraction of two Matrices.
Test Data:
Input the size of the square matrix (less than 5): 2
Input elements in the first matrix:
element - [0],[0]: 5
element - [0],[1]: 6
element - [1],[0]: 7
element - [1],[1]: 8
Input elements in the second matrix:
element - [0],[0]: 1
element - [0],[1]: 2
element - [1],[0]: 3
element - [1],[1]: 4
Expected Output:
The First matrix is:
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56
78
The Second matrix is:
12
3 4
The Subtraction of two matrix is:
44
44
12. Write a program in C for multiplication of two square Matrices.
Test Data:
Input the rows and columns of first matrix: 22
Input the rows and columns of second matrix: 22
Input elements in the first matrix:
element - [0],[0] : 1
element - [0],[1]: 2
element - [1],[0]: 3
element - [1],[1]: 4
Input elements in the second matrix:
element - [0],[0]: 5
element - [0],[1]: 6
element - [1],[0]: 7
element - [1],[1]: 8
Expected Output:
The First matrix is:
12
3 4
The Second matrix is:
56
78
The multiplication of two matrix is:
19 22
```

43 50

13.Write a program in C to find the number occurring odd number of times in an array.

Expected Output:

The given array is: 8 3 8 5 4 3 4 3 5
The element odd number of times is: 3

Write a program in C to find the missing number from a given array. There are no duplicates in list.

Expected Output:

The given array is: 13425698

The missing number is: 7