Problem Set on Array

1. Write a c program, declare an array with a size of 5. Store 10, 20, 30, 40 and 50 in it and print them as output.

Input	output
	10, 20, 30, 40, 50

2. Find out the size of the previous array.

Input	output
	Size of the array: 5

3. Write a C program to take input from user and store them in an array. Take 4 even years as input.

Input	output
2000	2000
2002	2002
2004	2004
2006	2006

4. Write a c program to take input in an array and print it.

Input	output
Enter array size: 10	Your elements: 4 12 7 19
element-1: 4	
element-2:12	
element-3:7	
element-4:19	

5. Write a C program to take 7 value from user in an array. Use a loop to input those values from user. As output print those values.

Input	output
5	Inputted values:
10	5
15	10
20	15
25	20
30	25
35	30
	35

6. Write a C program to take 7 values from user in an array. Now input values in that array and print the values in reverse order.

Input	output
5	Inputted values:
10	35
15	30
20	25
25	20
30	15
35	10
	5

7. Write a C program to take 5 character (vowels) from user as input in an array. Use a loop to input those character from user. As output print them.

Input	output
Α	Vowels:
E	A
I	E
0	1
U	0
	U

8.	Write a c program to take input n times. Here the value of n will be user defined. As
	output print the inputted values.

Input	output
Enter array size: 3	Your values:
4	4
5	5
6	6

9. Write a c program to take 10 user input in an array and print the sum of those 10 values.

Input	output
Enter array size: 10	Sum = 348
13	
17	
5	
8	
35	

10. Write a C program that would calculate the average of all the elements in an array.

Sample Input	Sample Output
Enter Array Elements: 10	Avg = 13.3
15	
15	

11. Write a C program to find the maximum value in an array.

Input	output
Array size = 10	Maximum: 55
55	
23	
20	
13	

12. Write a C program to find the minimum value in an array.

Input	output	
Array size = 10	Minimum: 13	
45		
23		
20		
13		

13. Write a program in C to find the maximum and minimum element in an array.

Input	output
Array size = 10	Maximum: 55
55	Minimum: 13
23	
20	
13	

14. Write a C program that would find the difference between the minimum and the maximum number in an array

Sample Input	Sample Output
Enter Array Elements: 90 120 22 11	Difference = 109

15. Write a program in C to find the second largest element in an array

Sample Input	Sample Output
Enter Array Elements: 90	Second Max: 60
60	
22	
11	

16. Write a C program that would search for a particular number in an array.

Sample Input	Sample Output
Enter Array Elements: 30 33 12 Enter the number: 12	Found at index 2

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

Input	output
Input array size: 5	The Even elements are :
Input elements in the array:	42 56 32
element - 1 : 25	The Odd elements are:
element - 2 : 47	25 47
element - 3 : 42	
element - 4 : 56	
element - 5 : 32	

18. Write a C program that would only print the sum of all the even numbers in an array.

Sample Input	Sample Output
Enter Array Elements:	Sum of Even Numbers = 52
30	
33	
12	
10	

19. Write a C program that would count the even numbers in an array.

Sample Output	
No. Even Numbers: 1	

20. Write a program in C to count a total number of duplicate elements in an array.

Sample Input	Sample Output
Enter Array Elements: 90	Duplicate 22
22 22 11	
23	
21 22	

21. Write a program in C to print all unique elements in an array

Sample Output
Unique Elements:
30
22
31