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

Input	output
2000	2000
2002	2002
2004	2004
2006	2006

3. 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
4	a[0]=4
12	a[0]=4 a[1]=12
7	a[2]=7
19	a[3]=19

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

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

5. Write a C program to take 7 values from the 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

6. 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

7. 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	

8. 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	

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

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

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

Input	output

Array size = 10	Minimum: 13
45	
23	
20	
13	

11. 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	

12. 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

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

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

14. 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

15. 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	

16. 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: 30 33 12 10	Sum of Even Numbers = 52

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

Sample Input	Sample Output
Enter Array Elements: 30 33 13	No. Even Numbers: 1

11	

18. 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	

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

Sample Input	Sample Output
Enter Array Elements:	Unique Elements:
30	30
22	22
31	31
23	
23	