**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 |

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

| Input | output |
| --- | --- |
| 2000  2002  2004 2006 | 2000  2002  2004 2006 |

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

| Input | output |
| --- | --- |
| Enter array size: 10  4  12  7  19  ………….. | Your elements: 4 12 7 19………. a[0]=4  a[1]=12  a[2]=7  a[3]=19  ……….. |

1. 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.

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

1. 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  10  15  20  25  30  35 | Inputted values: 35  30  25  20  15  10  5 |

1. 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 4  5  6 | Your values: 4  5  6 |

1. 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 13  17  5  8  ….  35 | Sum = 348 |

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

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

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

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

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

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

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

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

1. 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 |

1. 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 |

1. 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 |

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

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

1. 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 |

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

| **Sample Input** | **Sample Output** |
| --- | --- |
| Enter Array Elements: 30  33  13  11 | No. Even Numbers: 1 |

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

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

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

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