Assignments (DATA STRUCTURE USING ' C')

1. Write a C program to find the missing number in a given integer array of 1 to 10?

2. Write a C program to find the duplicate number on a given integer array?

3. Write a C program to find the largest and smallest number in an unsorted integer array?

4. Write a C program to find all pairs of an integer array whose sum is equal to a given number?

5. Write a C program to find duplicate numbers in an array if it contains multiple duplicates?

6. Write a C program to convert a byte array to String?

7. Write a C program to rotate an array left and right by a given number K?

8. Write a C program to find array of integers sorted in ascending order, find the starting and ending position of a given value?

9. Problem statement : Suppose You have been given an array of positive integers A1,A2,...,An with length N and you have to print an array of same length(N) where the values in the new array are the sum of every number in the array, except the number at that index.

10. Write a C program to find the largest three distinct elements in an array

11. Write a C program to Find Second largest element in an array

12. Write a C program to Move all zeroes to end of array

13. Write a C program to rearrange array such that even positioned are greater than odd

14. Write a C program to rearrange an array in maximum minimum form using Two Pointer Technique

15. Write a C program to find the element that appears once in an array where every other element appears twice

16. Write a C program to rearrange an array such that arr[i] = i

17. Write a C program to reorder an array according to given indexes

18. Write a C program to find the smallest missing number

19. Find maximum value of Sum(i*arr[i]) with only rotations on given array allowed

20. Write a program to create Fibonacci series using recursive function.

21. Write a program to Print "Welcome to VIT" Instead Of Your Name Using Array

22. Check String Is Palindrome Or Not Using For Loop

23. Sum of all array elements. – using recursion.

24. Count the total number of even and odd elements in an array.

25. 25)Count the total number of negative elements in an array.

26. Copy all elements from an array to another array.

27. Delete an element from an array at the specified position.

28. Search an element in an array.

29. Sort even and odd elements of the array separately.

30. Write a program to create pointers to structs.

31. Write a program to access members of a structure using pointers, we use the -> operator.

32. Write a program to find Dynamic memory allocation of structs.

33. Write a program to Store Information of Students Using Structure.

34. Write a program to store Student records as Structures and Sort them by Name.

35. Write a program to Add Two Complex Numbers.

36. Write a C programming find the maximum value between the two number using User defined Function.

37. Write a C programming swap the two number without using third variable using User defined Function.

38. Write a C program to print the given number is Magic or Not using User defined Function.

39. Write a C program to Check Prime or Armstrong number using User defined Function.

40. Write a C program to find the sum of natural numbers using a recursive function.

41. Write a C program to find the factorial of a non-negative integer entered by the user using recursion.

42. Write a program in C to find the sum of the series 1!/1 +2!/2+3!/3+4!/4+5!/5 using the function.

43. Write a C program to input radius of circle from user and find diameter, circumference and area of the given circle using function. How to find diameter, circumference and area of a circle using function in C programming.

44. Write a C program to input a number from user and find power of given number using recursion.

45. Write a recursive function in C programming to print all natural numbers between 1 to n.

46. Write a recursive function in C to check palindrome number. How to check whether a number is palindrome or not using recursion in C program.

47. Write a recursive function in C programming to calculate sum of digits of a number.

48. Write a recursive function in C to find factorial of a number.

49. Write a C program to print all elements of array using recursion. How to display all elements of an array using recursion.

50. Write a C program *call by reference* example :*Swapping the values of the two variables*.

51. Write a C program Find all prime numbers between the given interval using functions.

52. Write a C program to Generate nth Fibonacci term using recursion.

53. write a C program using Stricmp() Function (Case In-Sensitive Compare) and Strncat() Function (String Concatenate).

54. Write a C program Check whether a number is a palindrome or not using recursion.

55. Write a C program to Find gcd (HCF) of two numbers using recursion.

56. Write a C Program to print your name 10 times without using loops or goto statement using recursion function.

57. Write a program in C to add two numbers using pointers.

58. Write a program in C to add numbers using call by reference.

59. Write a program in C to find the maximum number between two numbers using a pointer.

60. Write a program in C to store n elements in an array and print the elements using a pointer.

61. Write a program in C to find the largest element using Dynamic Memory Allocation.

62. Write a program in C to calculate the length of a string using a pointer.

63. Write a program in C to count the number of vowels and consonants in a string using a pointer.

64. Write a program in C to sort an array using a pointer

65. Write a C program to demonstrate how a function returns a pointer.

66. Write a C program to copy one array elements to another array using pointers.

67. Write a C program to input elements in array and search an element in array using pointers.

68. Write a C program to show an example of pointer to pointer.

69. Write a C program to find Maximum of two numbers using function returning a pointer(pointer to function concepts).

70. Write a program to add, subtract and multiply two complex numbers using structures to function.

71. Write a program to compare two dates entered by user. Make a structure named Date to store the elements day, month and year to store the dates. If the dates are equal, display "Dates are equal" otherwise display "Dates are not equal".