



Time: 11:15 to 12:45 AM

Date: October 21, 2024

Max mark: 30

1. Attempt the following:

- (a) Write a program to input N (= 10) integers into an array and find their sum using a **for** loop. Accept N from user. (2)
- (b) Input N (= 5) integers into an array and display the array in reverse order using a **while** loop. Accept N from user. (2)
- (c) Write a program to find the maximum value in an array of size N integers using a **for** loop. Accept N from user. (2)
- (d) Input N (= 10) integers and count how many are even and odd using a **for** loop. Accept N from user. (2)
- (e) Copy the elements of one array of N (= 5) integers into another using a **do...while** loop. Accept N from user. *not operation* (2)
- ~~(f)~~ Create a program that sums the elements located at odd indices of an array of N (= 10) integers using a **for** loop. Accept N from user. (2)
- (g) Find both the minimum and maximum element from an array of N (= 10) integers using a **for** loop. Accept N from user. (2)
- (h) Input 10 (= N) integers and calculate the average using a **while** loop. Accept N from user. (2)
- (i) Write a program to count the number of positive and negative numbers in an array of N (= 10) elements using a **for** loop. Accept N from user. (2)
- (j) Input N (= 8) integers and check if the array is a palindrome (same forward and backward) using a **for** loop. Accept N from user. (2)
- (k) Input N (= 10) integers into an array and find the frequency of a given element using a **do...while** loop. Accept N from user. (2)
- (l) Write a program to perform a left rotation of an array of N (= 6) elements by one position using a **for** loop. (2)
- (m) Perform a right rotation of an array of N (= 5) elements by one position using a **do...while** loop. (2)
- ~~(n)~~ Sort an array of N (= 5) integers in ascending order using a **for** loop. Accept N from user. (2)
- ~~(o)~~ Input an array of N (= 6) integers and count and print the occurrences of each element using nested **for** loops. (2)

Coding is the alchemy of bits and magic.