

Task 2: Array Manipulation - prefix sum

AIM: To find the prefix sum of a given array

ALGORITHM:

1. Start
2. Read array size n
3. Read array elements
4. prefix[0] = arr[0]
5. prefix[i] = prefix[i-1] + arr[i]
6. Display prefix array
7. Stop

PROGRAM:

```
import java.util.Scanner;  
class prefixsum{  
    public static void main(String[] args)  
    {  
        Scanner sc = new  
        Scanner (System.in);  
        int n = sc.nextInt();  
        int []arr = new int[n];  
        int []prefix = new int[n];  
        for (int i=0; i<n; i++)  
            arr[i] = sc.nextInt();  
        prefix[0] = arr[0];  
        for (int i=1; i<n; i++)  
            prefix[i] = prefix[i-1] + arr[i];  
        for (int i=0; i<n; i++)  
            System.out.println(prefix[i] + " ");  
    }  
}
```

VELTECH	
EX. No.	2
PERFORMANCE (5)	5
RESULT AND ANALYSIS (3)	3
VIVA VOCE (3)	3
RECORD (4)	4
TOTAL (15)	15
SIGN WITH DATE	03/02/21

RESULT:- Now, the prefix sum array is completed successfully.

internal model of self-control

Input

5 10 20 10 5 15

Output

10 30 40 45 60

(1) $\text{GDP} = \text{GDP}_{\text{initial}} + \text{rate} \times \text{time}$

(2) $\text{GDP} = \text{GDP}_{\text{initial}} + \text{rate} \times \text{time}$

(3) $\text{GDP} = \text{GDP}_{\text{initial}} + \text{rate} \times \text{time}$

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(5) $\text{GDP} = \text{GDP}_{\text{initial}} + \text{rate} \times \text{time}$

(6) $\text{GDP} = \text{GDP}_{\text{initial}} + \text{rate} \times \text{time}$

(7) $\text{GDP} = \text{GDP}_{\text{initial}} + \text{rate} \times \text{time}$

(8) $\text{GDP} = \text{GDP}_{\text{initial}} + \text{rate} \times \text{time}$

~~if economic growth is self-reinforcing~~