

2. You work as a software engineer for a company that manages online retail stores. The company wants to implement a feature that provides real-time insights into daily sales trends. One of the key metrics is the cumulative sales amount up to a specific hour of the day.

The goal is to compute the prefix sum of the sales array, where each element in the array represents the sales amount at a specific hour. The prefix sum at any given hour is the total sales amount from the start of the day up to that hour.

Input

An array Sales[] of n integers representing the sales amount at each hour of the day.

Output

An array PrefixSum[] of n integers where PrefixSum[i] is the cumulative sales amount from the start of the day up to hour i.

Example

Input:

Sales[] = [10, 20, 15, 30, 25]

Output:

PrefixSum[] = [10, 30, 45, 75, 100]

```
1  import java.util.*;
2
3  class SalesPrefixSum {
4      public static void main(String[] args) {
5          int[] sales = {10, 20, 15, 30, 25};
6          int[] prefixSum = new int[sales.length];
7
8          prefixSum[0] = sales[0];
9          for (int i = 1; i < sales.length; i++) {
10             prefixSum[i] = prefixSum[i - 1] + sales[i];
11         }
12
13         System.out.println("Prefix Sum: " + Arrays.toString(prefixSum));
14     }
15 }
16
17
18
19
```

PROBLEMS	6	OUTPUT	DEBUG CONSOLE	TERMINAL	PORTS
PS C:\Users\vivek> & 'C:\Program Files\Eclipse Adoptium\jdk-21.0.4.7-hotspot\bin\java.exe' '-XX:+Sho odesws_f39ab\jdt_ws\jdt.ls-java-project\bin' 'SalesPrefixSum' Prefix Sum: [10, 30, 45, 75, 100]					