**Phase 1 Practice Project – Assisted Practice**

**3 . Write a program in java to find the sum of n number of elements in the range of L and R where 0<=L<=R<=n-1**

**Source Code:**

**package** slm2;

**import** java.util.Scanner;

**public** **class** SumInRange {

**public** **static** **void** main(String[] args) {

Scanner scanner = **new** Scanner(System.***in***);

System.***out***.print("Enter the number of elements (n): ");

**int** n = scanner.nextInt();

**int**[] arr = **new** **int**[n];

System.***out***.println("Enter the elements:");

**for** (**int** i = 0; i < n; i++) {

arr[i] = scanner.nextInt();

}

System.***out***.print("Enter the left index (L): ");

**int** L = scanner.nextInt();

System.***out***.print("Enter the right index (R): ");

**int** R = scanner.nextInt();

**int** sum = *calculateSumInRange*(arr, L, R);

System.***out***.println("The sum of elements in the range [" + L + ", " + R + "] is: " + sum);

scanner.close();

}

**public** **static** **int** calculateSumInRange(**int**[] arr, **int** L, **int** R) {

**int** sum = 0;

**if** (L >= 0 && R < arr.length && L <= R) {

**for** (**int** i = L; i <= R; i++) {

sum += arr[i];

}

} **else** {

System.***out***.println("Invalid range. Ensure 0 <= L <= R <= n-1.");

}

**return** sum;

}

}

**Output:**

