**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**

**package** arrays;

**import** java.util.Scanner;

**class** CustomException **extends** Exception {

**public** CustomException(String msg) {

**super**(msg);

}

}

**public** **class** sumOfElements {

**public** **static** **int** sumOfAllElements(**int** arr[], **int** l, **int** r) {

**int** sum = 0;

**for**(**int** i=l; i<=r; i++) {

sum += arr[i];

}

**return** sum;

}

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

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

**try** {

System.***out***.println("Enter the size of array: ");

**int** size = sc.nextInt();

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

**int** l=0,r=0;

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

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

arr[i] = sc.nextInt();

}

System.***out***.println("\nArray elements: ");

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

System.***out***.print(arr[i]+" ");

}

**try** {

System.***out***.println("\nEnter the value of L: ");

l = sc.nextInt();

**if**(l < 0) {

sc.close();

**throw** **new** CustomException("L cannot be less than zero.");

}

System.***out***.println("Enter the value of R: ");

r = sc.nextInt();

**if**(r > size-1) {

sc.close();

**throw** **new** CustomException("R cannot be more than the size of the array.");

}

**if**(l > r) {

sc.close();

**throw** **new** CustomException("L cannot be more than R.");

}

} **catch** (CustomException e) {

System.***out***.println(e.getMessage());

}

System.***out***.println("\nSum of elements: "+ sumOfAllElements (arr, l, r));

} **catch** (Exception e) {

System.***out***.println(e);

}

sc.close();

}

}