**// ARRAY BASED TASK //**

**Q1. Given an array of integers (in a series) and we have to find its**

**missing elements (there will be a missing element)**

**Input/Output:**

**Input array: 1, 2, 3, 4, 6, 7**

**Output:**

**Missing element is: 5**

**// SOURCE CODE**

import java.util.Scanner;

public class MissingElementFinder {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

int[] array = {1, 2, 3, 4, 6, 7};

int n = array.length + 1;

int expectedSum = n \* (n + 1) / 2;

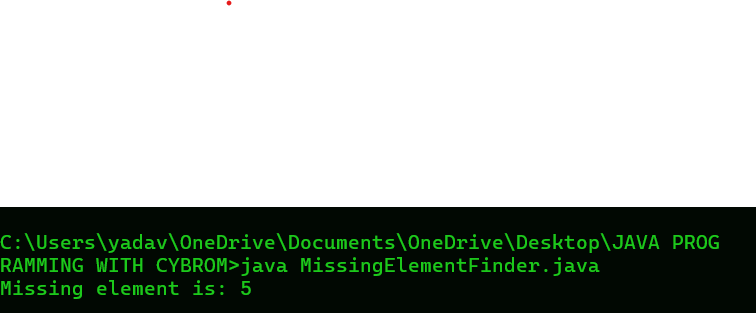
int actualSum = 0;

for (int i = 0; i < array.length; i++) {

actualSum += array[i];

}

System.out.println("Missing element is: " + (expectedSum - actualSum));

// OUTPUT 

Q2.Given an array of integers and we have to find their average .

Input/Output:

Enter number of elements you want in array : 10

Enter all the elements :

65

45

25

65

84

74

74

15

36

Sum of the array elements is : 579

Average of the array elements is : 57.9

// SOURCE CODE

import java.util.Scanner;

public class AverageArray {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

System.out.print("Enter number of elements you want in array: ");

int n = sc.nextInt();

int[] array = new int[n];

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

int sum = 0;

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

array[i] = sc.nextInt();

sum += array[i];

}

double average = (double) sum / n;

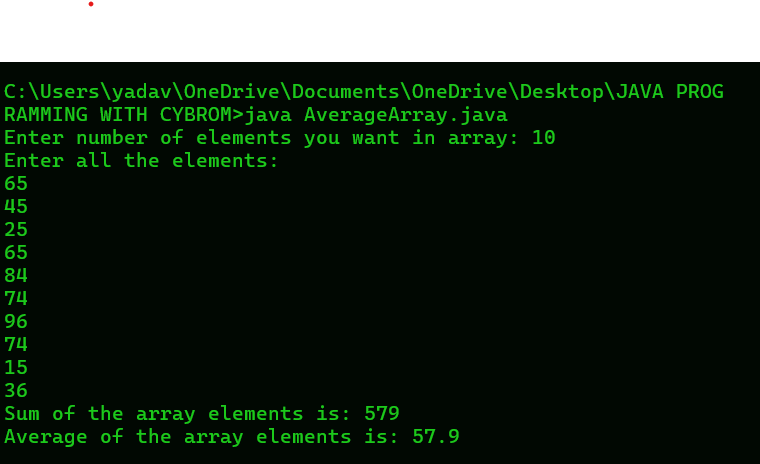
System.out.println("Sum of the array elements is: " + sum);

System.out.println("Average of the array elements is: " + average);

}

}

// OUTPUT



Q3. Move all zero at the end of the array

Given an integer array with zeros (0’s) and we have to move all zeros at

the end of the array

Input/Output:

Input array: 5, 1, 6, 0, 0, 3, 9, 0, 6, 7, 8, 12, 10, 0, 2

After moving 0 at the end

Output array: 5, 1, 6, 3, 9, 6, 7, 8, 12, 10, 2, 0, 0, 0, 0

// SOURCE CODE

public class MoveZeroes {

public static void main(String[] args) {

int[] array = {5, 1, 6, 0, 0, 3, 9, 0, 6, 7, 8, 12, 10, 0, 2};

int n = array.length;

int count = 0;

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

if (array[i] != 0) {

array[count++] = array[i];

}

}

while (count < n) {

array[count++] = 0;

}

System.out.print("After moving 0 at the end\nOutput array: ");

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

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

}

}

}

// OUTPUT:

