

Array

Assignment-1

```
package Arrays;

import java.util.Scanner;

public class SumAndAverage {

    public static void main(String[] args) {

        Scanner scanner = new Scanner(System.in);

        System.out.print("Enter the number of elements in the array: ");
        int n = scanner.nextInt();

        int[] arr = new int[n];

        System.out.println("Enter the elements of the array:");
        for (int i = 0; i < n; i++)
        {
            arr[i] = scanner.nextInt();

        }

        int sum = 0;
        for (int num : arr) {
            sum += num;
        }

        double average = (double) sum / n;

        System.out.println("Sum of the elements: " + sum);
        System.out.println("Average of the elements: " + average);

        scanner.close();
    }
}
```

Output

```
Enter the number of elements in the array: 5
Enter the elements of the array:
    22 34 54 66 28
Sum of the elements: 204
Average of the elements: 40.8
```

Assignment-2

```
package Arrays;

import java.util.Scanner;

public class BubbleSort {

    public static void main(String[] args) {

        Scanner scanner = new Scanner(System.in);

        // Get the size of the array from the user
        System.out.print("Enter the number of elements in the array: ");
        int n = scanner.nextInt();

        // Create an array of size n
        int[] arr = new int[n];

        // Get the elements of the array from the user
        System.out.println("Enter the elements of the array:");
        for (int i = 0; i < n; i++) {
            arr[i] = scanner.nextInt();
        }

        // Sort the array using bubble sort

        for (int i = 0; i < n - 1; i++) {

            for (int j = 0; j < n - i - 1; j++)
            {
                if (arr[j] > arr[j + 1])
                {
                    // Swap arr[j] and arr[j+1]
```

```

        int temp = arr[j];
        arr[j] = arr[j + 1];
        arr[j + 1] = temp;
    }
}

// Print the sorted array
System.out.println("Sorted array:");
for (int num : arr)
{
    System.out.print(num + " ");
}
System.out.println();

scanner.close();

}

}

```

Output

```

Enter the  number of elements in the array: 6
Enter the elements of the array:
21 23 43 37 65 38
Sorted array:
21 23 37 38 43 65

```