

Lab:5

1. import java.util.Scanner;

```
public class SumAverage {  
    public static void main(String[] args) {  
        Scanner sc = new Scanner(System.in);  
        System.out.print("Enter number of elements: ");  
        int n = sc.nextInt();  
        int[] arr = new int[n];  
        int sum = 0;  
        System.out.println("Enter " + n + " numbers:");  
        for (int i = 0; i < n; i++) {  
            arr[i] = sc.nextInt();  
            sum += arr[i];  
        }  
        double average = (double) sum / n;  
        System.out.println("Sum: " + sum);  
        System.out.println("Average: " + average);  
    }  
}
```

```

3. import java.util.Scanner;

public class MarksGrader {

    public static void main(String[] args) {

        Scanner sc = new Scanner(System.in);

        System.out.print("Enter number of students: ");

        int n = sc.nextInt();

        int[] marks = new int[n];

        int sum = 0;

        int max = Integer.MIN_VALUE;

        System.out.println("Enter marks of " + n + " students:");

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

            marks[i] = sc.nextInt();

            sum += marks[i];

            if (marks[i] > max) {

                max = marks[i];

            }

        }

        double avg = (double) sum / n;

        int countAboveAvg = 0;

        for (int mark : marks) {

            if (mark > avg) countAboveAvg++;

        }

        System.out.println("Average marks: " + avg);

        System.out.println("Highest score: " + max);

        System.out.println("Students scoring above average: " + countAboveAvg);

    }

}

```

4. import java.util.Scanner;

```
public class ProductPriceFilter {  
    public static void main(String[] args) {  
        Scanner sc = new Scanner(System.in);  
        int[] prices = new int[10];  
        System.out.println("Enter prices of 10 products:");  
        for (int i = 0; i < 10; i++) {  
            prices[i] = sc.nextInt();  
        }  
        System.out.println("Products priced above ₹500:");  
        for (int price : prices) {  
            if (price > 500) {  
                System.out.println("₹" + price);  
            }  
        }  
        int min = prices[0], max = prices[0];  
        for (int price : prices) {  
            if (price < min) min = price;  
            if (price > max) max = price;  
        }  
        System.out.println("Cheapest product: ₹" + min);  
        System.out.println("Costliest product: ₹" + max);  
    }  
}
```