import java.util.Scanner;

public class IntegerArray {

public static void main(String[] args) {

//Initialize array

int [] arr = new int [] {3, 2, 4, 5, 6, 4, 5, 7, 3, 2, 3, 4, 7, 1, 2, 2, 0, 0};

int sum = 0;

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

System.out.println( arr[i]);

}

//Loop through the array to calculate sum of elements

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

sum = sum + arr[i];

}

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

arr[15]=sum;

// calculating average value of array

int avg=sum/15;

System.out.println("Average of all elements in an array is : "+avg);

arr[16]=avg;

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

System.out.println( arr[i]);

}

// computing smallest element in an array

int size=arr.length;

int temp;

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

for(int j = i+1; j<size; j++){

if(arr[i]>arr[j]){

temp = arr[i];

arr[i] = arr[j];

arr[j] = temp;

}

}

}

arr[17]=arr[0];

;

System.out.println("the smallest element in an array is : "+arr[17]);

}

}