public class Lesson\_9\_04\_findNumberInArray {  
 public static void main(String[] args) {  
 double[] arrayDouble = {2.4, 4.9, 5, 67, 1.0, 2.7};  
 int[] arrayInt = {1, 4, 5, 7, 3, 3, 6};  
  
 double max = *findMax*(arrayDouble);  
 System.*out*.println("max number: " + max);  
  
 double number = 2.7;  
 int index = *findNumberIndex*(arrayDouble, number);  
 *printNumberAndIndex*(number, index);  
  
 double average = *calcAverageOfEvenNumbers*(arrayInt);  
 System.*out*.println("average of even numbers: " + average);  
 }  
  
 private static void printNumberAndIndex(double number, int index) {  
 if (index == -1) {  
 System.*out*.printf("Elem %f is not in array%n", number);  
 } else {  
 System.*out*.printf("elem %f has index %d%n", number, index);  
 }  
 }  
  
 public static double findMax(double[] array) {  
 double record = array[0];  
 for (int i = 0; i < array.length; i++) {  
 if (record < array[i]) {  
 record = array[i];  
 }  
 }  
 return record;  
 }  
  
 public static int findNumberIndex(double[] array, double number) {  
 for (int i = 0; i < array.length; i++) {  
 if (*isDoublesEqual*(number, array[i])) {  
 return i;  
 }  
 }  
 return -1;  
 }  
  
 public static double calcAverageOfEvenNumbers(int[] array) {  
 int sum = 0;  
 int count = 0;  
 for (int i = 0; i < array.length; i++) {  
 if (array[i] % 2 == 0) {  
 sum += array[i];  
 count++;  
 }  
 }  
 return (double) sum / count;  
 }  
  
 public static boolean isDoublesEqual(double a, double b) {  
 return Math.*abs*(a - b) < 0.0001; }}