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// A program for collecting temperature data

package program9;

import java.util.Scanner;

import java.util.Arrays;

public class Program9 {

public static void main(String[] args) {

double[] cityA;

double[] cityB;

cityA = HighTemp('A');

cityB = HighTemp('B');

System.out.println("City A : \n The array for city A : " + Arrays.toString(cityA) + "\n The average for city A is: "+ Average(cityA)+"\n The no. of times city A was warmer than city B is : "+ CompareArr1(cityA, cityB) );

System.out.println("City B : \n The array for city A : " + Arrays.toString(cityB)+ "\n The average for city B is: "+ Average(cityB)+"\n The no. of times city B was warmer than city A is : "+ CompareArr2(cityA, cityB) );

}

//Get High temps

public static double[] HighTemp(char a)

{

System.out.println("Enter the city"+ a +" high temperature for 5 days");

Scanner keyboard = new Scanner(System.in);

double[] tempInput= new double[5];

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

tempInput[i] = keyboard.nextDouble();

}

return tempInput;

}

//Calculate Average

public static double Average(double [] arr)

{

double avg = 0;

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

avg += arr[i];

}

return avg/arr.length;

}

//Compare Arrays

public static int CompareArr1(double [] arr1, double [] arr2)

{

int days =0;

for (int i = 0; i < arr1.length; i++) {

if (arr1[i] > arr2[i]) {

days ++;

}

}

return days;

}

public static int CompareArr2(double [] arr1, double [] arr2)

{

int days =0;

for (int i = 0; i < arr2.length; i++) {

if (arr1[i] < arr2[i]) {

days ++;

}

}

return days;

}

}

**Output**

run:

Enter the cityA high temperature for 5 days

10

20

30

40

50

Enter the cityB high temperature for 5 days

20

10

60

30

60

City A :

The array for city A : [10.0, 20.0, 30.0, 40.0, 50.0]

The average for city A is: 30.0

The no. of times city A was warmer than city B is : 2

City B :

The array for city A : [20.0, 10.0, 60.0, 30.0, 60.0]

The average for city B is: 36.0

The no. of times city B was warmer than city A is : 3

BUILD SUCCESSFUL (total time: 17 seconds)