/\*-----------------------------------Class created -------------------------------------\*/

import java.io.\*;

import java.util.Scanner;

//initializes array and file

public class numAnalysis {

private double arr[];

private File numbers;

public numAnalysis(File nums) {

numbers = nums;

arr = new double[12];

}

//create method to read numbers from file

public void read()throws IOException {

Scanner input = new Scanner(numbers);

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

arr [i] = input.nextDouble();

}

}

// method to get lowest number from array list

public double lowestNumber() {

double lowest = arr[0];

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

{

if (arr[i] < lowest) {

lowest = arr[i];

}

}

return lowest;

}

//Method to get highest number from array list

public double highestNumber() {

double highest = arr[0];

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

{

if (arr[i] > highest) {

highest = arr[i];

}

}

return highest;

}

//method to get highest number from array List

public double totalSum(){

double sum = 0;

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

sum += arr[i];

}

return sum;

}

//method to get average from the array

public double average() {

double total = 0;

double avg;

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

total += arr[i];

}

avg = total / arr.length;

return avg;

}

}

/\*-------------------------------------------Main------------------------------------------\*/

import java.io.\*;

public class Main {

/\* This program is intended to read a File and calculate the lowest, highest, Sum and Average

of all the numbers inside the file.

\*/

public static void main(String[] args) throws Exception {

File nums1 = new File("numbers.txt");

numAnalysis inputFile = new numAnalysis(nums1);

inputFile.read();

System.out.println("The lowest number is: " + inputFile.lowestNumber());

System.out.println("The highest number is: " + inputFile.highestNumber());

System.out.println("The total sum is: " + inputFile.totalSum());

System.out.println("The average is: " + inputFile.average());

}

}

/\*-----------------------------------------------------outPut--------------------------------------\*/

The lowest number is: 1.09

The highest number is: 82.76

The total sum is: 367.89000000000004

The average is: 30.657500000000002

Process finished with exit code 0