Code:

import java.io.\*;

import java.util.\*;

class Assignment2

{

static int [] sortArray(int [] aR, int a)

{

int temp=0;

for (int n=0; n<a;n++) //bubble sort array

{

for(int m=n+1; m<a;m++)

{

if(aR[m]<aR[n])

{

temp=aR[m];

aR[m]=aR[n];

aR[n]=temp;

}

}

}

return aR;

}

static double average(int [] aR, int a)

{

double average;

double sum=0;

for(int n=0; n<a;n++)

{

sum=sum+aR[n]; //sum over all values

}

average=sum/a; //compute average

return average;

}

static int [] grades(int [] aR, int a, int [] gradar)

{

for(int n=0;n<a;n++)

{

if(aR[n]<=100 && aR[n]>=90) //check for As

gradar[0]++;

else if(aR[n]<=89 && aR[n]>=80) //check for Bs

gradar[1]++;

else if(aR[n]<=79 && aR[n]>=70) //check for Cs

gradar[2]++;

else if(aR[n]<=69 && aR[n]>=60) //check for Ds

gradar[3]++;

else if(aR[n]<60)

gradar[4]++;

}

return gradar;

}

static double medi(int [] aR, int a)

{

int middle=0;

if(a%2==0)

{

int b=a/2;

int c=a/2;

c--;

middle=(aR[b]+aR[c])/2; //get median for even number of scores

}

if(a%2!=0)

{

int d=(a/2);

middle=aR[d]; //get median for odd number of scores

}

return middle;

}

public static void main(String [] args) throws IOException

{

String infile; //set file variable

Scanner cin=new Scanner(System.in); //set scanner

System.out.println("Hello kiddo! Please enter your file name\n"); //greet the user

infile=cin.next(); //get the file name

Scanner in=new Scanner(new FileReader(infile)); //scan the file

int i=in.nextInt(); //get the number of scores

int array[]=new int[i]; //set up the array for the scores

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

{

array[n]=in.nextInt(); //fill array

}

int aR[]=new int[i];

aR=sortArray(array, i); //sort the array

double avg=average(aR,i); //get the average

int gradar[]=new int[5]; //set up array for grades

grades(aR,i,gradar); //count the grades

double med=medi(aR,i); //get the median

System.out.println("okay! here's your info!\nThe minimum score is " + aR[0]

+ "\nThe maximum score is " + aR[i-1]+"\nThe average score is " + avg +

"\nThe median score is " + med +

"\nThe corresponding letter grades for total scores are below\nA: "+gradar[0]

+"\nB: " +gradar[1]+"\nC: " +gradar[2]+"\nD: " +gradar[3]+"\nF: " +gradar[4]+

"\nCool! Now you don't have to calculated it yourself.\nBye!");

return;

}

}

Nice.txt

8

69

90

10

82

75

26

31

67

Output:

thomas% java Assignment2

Hello kiddo! Please enter your file name

nice.txt

okay! here's your info!

The minimum score is 10

The maximum score is 90

The average score is 56.25

The median score is 68.0

The corresponding letter grades for total scores are below

A: 1

B: 1

C: 1

D: 2

F: 3

Cool! Now you don't have to calculated it yourself.

Bye!

thomas%