#include <iostream>

#include <iomanip>

#include <limits> // numeric\_limits

using namespace std;

double inputValidate(double num)

{

while(!(cin >> num) || (num < 0 || num > 100))

{

cout << "Error. An integer from 0-100 must be entered: ";

cin.clear();

cin.ignore(numeric\_limits<streamsize>::max(), '\n');

}

return num;

}

void getScore(double &num)

{

cout << "Enter a test score: ";

num = inputValidate(num);

}

double ifLowest(double num1,

double num2,

double num3,

double num4,

double num5)

{

double lowest;

if (num1 <= num2)

{

if (num1 <= num3)

{

if (num1 <= num4)

{

if (num1 <= num5)

{

lowest = num1;

}

}

}

}

return lowest;

}

double findLowest(double num1,

double num2,

double num3,

double num4,

double num5)

{

double smallest;

smallest = ifLowest(num1, num2, num3, num4, num5);

smallest = ifLowest(num2, num3, num4, num5, num1);

smallest = ifLowest(num3, num4, num5, num1, num2);

smallest = ifLowest(num4, num5, num1, num2, num3);

smallest = ifLowest(num5, num1, num2, num3, num4);

return smallest;

}

void calcAverage(double num1,

double num2,

double num3,

double num4,

double num5)

{

double average,

lowest = findLowest(num1, num2, num3, num4, num5);

if (num1 == lowest)

average = (num2 + num3 + num4 + num5) / 4;

else if (num2 == lowest)

average = (num1 + num3 + num4 + num5) / 4;

else if (num3 == lowest)

average = (num1 + num2 + num4 + num5) / 4;

else if (num4 == lowest)

average = (num1 + num2 + num3 + num5) / 4;

else if (num5 == lowest)

average = (num1 + num2 + num3 + num4) / 4;

cout << "After dropping the lowest score, the test average is " << fixed << setprecision(2) << average << endl;

}

int main()

{

double score1,

score2,

score3,

score4,

score5;

getScore(score1);

getScore(score2);

getScore(score3);

getScore(score4);

getScore(score5);

calcAverage(score1, score2, score3, score4, score5);

return 0;

}

/\* Test result

Enter a test score: 23

Enter a test score: 25

Enter a test score: 29

Enter a test score: 11

Enter a test score: 25

After dropping the lowest score, the test average is 25.50

\*/