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// File: HW\_1b.cpp

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//

// Description:

// This program will take three temperatures

// inputted by the user and find the average. Then

// it will display the average temperature for the

// cities.

// ====================================================

#include <iostream>

using namespace std;

void getTemps(int & temp1, int & temp2, int & temp3);

int calcAvg(int temp1, int temp2, int temp3);

void displayAvg(int avg);

// ====== main ========================================

//

// ====================================================

int main()

{

int temp1, temp2, temp3, avg;

getTemps(temp1, temp2, temp3);

avg = calcAvg(temp1, temp2, temp3);

displayAvg(avg);

return 0;

}// end of main()

// ====================================================

// ========= getTemps =================================

// This function will ask the user for the temperatures

// of three cities and assign the values to variables.

//

// Input:

// The user will input three values into the function.

//

// Output:

// The values will be assigned variables that will

// be passed to other functions.

// ====================================================

void getTemps(int & temp1, int & temp2, int & temp3)

{

cout << "Enter the temperatures of 3 cities." << "\n";

cout << "#1: ";

cin >> temp1;

cout << "#2: ";

cin >> temp2;

cout << "#3: ";

cin >> temp3;

}// end of getTemps()

// ====================================================

// ========= calcAvg ==================================

// This function will take the assigned values and

// calculate the average temperature of the cities.

//

// Input:

// The assigned values will be passed to the

// function as variables.

//

// Output:

// The average temperature will be calculated and

// the value will be returned to main.

// ====================================================

int calcAvg(int temp1, int temp2, int temp3)

{

int avg;

avg = (temp1 + temp2 + temp3) / 3;

return avg;

}// end of calcAvg()

// ====================================================

// ========= displayAvg ===============================

// This function will display the average temperature.

//

// Input:

// A value that will represent the average will

// be passed through the function.

//

// Output:

// The function will display the temperature from

// the three cities in a simple format.

// ====================================================

void displayAvg(int avg)

{

cout << "\n";

cout << "The average temperature is " << avg << " degrees" << "\n";

cout << "\n";

}// end of displayAvg()

// ====================================================

/\* ==== OUTPUT ==============================================

Enter the temperatures of 3 cities.

#1: 85

#2: 77

#3: 95.6

The average temperature is 85 degrees

Press any key to continue . . . \*/