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//WEEK3

//FILE : test2Program2

/\* Cyber Tailor

In 3-4 sentences define static vairable.

A static varialbe is one whose value, once defined, can be called repeatedly throughout the run of the program.

Unlike a global varialbe, it can only be referenced by the function where it was declared.

in 3-4 sentences define static global variable.

A static global variable is one which, once defined, can be repeatedly accessed from anywhere within a program throughout it's runtime.

Demonstrate your understanding of static variables by

creating a small application that computes the

running average of the given values.

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#include <iostream>

#include <cmath>

#include <cstdlib>

//GLOBAL VARIABLE (CONSTANT)

const double N(3);

double avgThis(int num1, int num2, int num3)

{

using namespace std;

double avg = (num1 + num2 + num3) / N;

return avg;

}

int main ()

{

using namespace std;

// Clear Console

system("cls");

// Instantiate Variables

int num1(1), num2(2), num3(3);

int new\_num, count(1);

double avg;

char endit;

// Introduction

cout << "To demonstrate a moving average, we'll start with these numbers: 1, 2, and 3\n\n";

cout << "Now, with every integer you enter, the moving average for the last 3 numbers will be displayed. \n";

do {

// Call function to average last 3 numbers

avg = avgThis(num1, num2, num3);

// Display

cout << "Numbers: " << num1 << ", " << num2 << ", " << num3 << "\n";

cout << "Running Avg: " << avg << "\n";

// Input

cout << "Enter an integer, a negative will terminate program: ";

cin >> new\_num;

// 'Move' the numbers to average

if (count%3==1){

num1 = new\_num;

} else if (count%3==2) {

num2 = new\_num;

} else if (count%3==0) {

num3 = new\_num;

}

count++;

} while (!(new\_num < 0));

return 0;

}