Project 4

#include <iostream>

#include <iomanip>

#include "SavingsAccount.h"

using namespace std;

double SavingsAccount::annualInterestRate = 0.0;

void SavingsAccount::calculateMonthlyInterest()

{

savingsBalance += savingsBalance \* ( annualInterestRate / 12.0 );

}

void SavingsAccount::modifyInterestRate( double i )

{

annualInterestRate = ( i >= 0.0 && i <= 1.0 ) ? i : 0.03;

}

void SavingsAccount::printBalance() const

{

cout << fixed << '$' << setprecision( 2 ) << savingsBalance;

}

#include <iostream>

#include <iomanip>

#include "SavingsAccount.h"

using namespace std;

int main()

{

SavingsAccount saver1( 2000.0 );

SavingsAccount saver2( 3000.0 );

SavingsAccount::modifyInterestRate( .03 );

cout << "Initial balances:\nSaver 1: ";

saver1.printBalance();

cout << "\tSaver 2: ";

saver2.printBalance();

saver1.calculateMonthlyInterest();

saver2.calculateMonthlyInterest();

cout << "\n\nBalances after 1 month's interest applied at .03:\n"

<< "Saver 1: ";

saver1.printBalance();

cout << "\tSaver 2: ";

saver2.printBalance();

SavingsAccount::modifyInterestRate( .04 );

saver1.calculateMonthlyInterest();

saver2.calculateMonthlyInterest();

cout << "\n\nBalances after 1 month's interest applied at .04:\n"

<< "Saver 1: ";

saver1.printBalance();

cout << "\tSaver 2: ";

saver2.printBalance();

cout << endl;

system("pause");

}