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//*****
// TITLE:                      Exam 1
// FILENAME:                   main.cpp
// PREPARED FOR:               CS230
// PROGRAMMER(S):              Devon J. Smith
// DEVELOPMENT DATE:           08/03/14
// COMPILER USED:              Apple LLVM Version 5.1
// TARGET PLATFORM:            Mac OS X i386 & x86_64
//=====
//                                PROJECT FILES
//    <LIST ALL PROGRAM AND HEADER FILES IN THE PROJECT HERE>
//        main.cpp (main)
//        Donations.cpp
//        Donations.h
//=====
//                                REVISION HISTORY
//    List revisions made to the Program
//
//    DATE      PROGRAMMER      DESCRIPTION OF CHANGES MADE
//    08/03/14  Devon J. Smith   Original
//=====
//                                PROGRAM DESCRIPTION
//    Gets a vector of people and calculates donations made. Also determines if the
//    person is home
//    or not.
//
// INPUTS:    None
//
// OUTPUTS:   A list of people and how much they donated. Outputs total donations
//            and expected donations
//
//=====
//                                INCLUDE FILES
#include "Donations.h"
//
//=====
//                                CONSTANT DEFINITIONS
//                                NONE
//
//=====
//                                EXTERNAL CLASS VARIABLES
//                                NONE
//=====

//*****
//                                BEGINNING OF PROGRAM CODE
//*****
using namespace std;

int main(int argc, const char * argv[])
{
    Donations d;
    vector<Donations> donationList;
    int expectedDonations = 0;
    int totalDonations = 0;
    srand((unsigned) time(NULL));

```

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donationList.push_back(Donations("Nelsons", d.actualDonation(2)));
donationList.push_back(Donations("Hills", d.actualDonation(1)));
donationList.push_back(Donations("Kings", d.actualDonation(3)));
donationList.push_back(Donations("Martins", d.actualDonation(1)));
donationList.push_back(Donations("Moores", d.actualDonation(2)));
donationList.push_back(Donations("Wilsons", d.actualDonation(1)));
donationList.push_back(Donations("Davis", d.actualDonation(3)));
donationList.push_back(Donations("Browns", d.actualDonation(2)));
donationList.push_back(Donations("Williams", d.actualDonation(2)));
donationList.push_back(Donations("Johnsons", d.actualDonation(2)));
donationList.push_back(Donations("Smiths", d.actualDonation(1)));
donationList.push_back(Donations("Jones", d.actualDonation(2)));

for (int i = 0; i < donationList.size(); i++)
{
    int home = rand() %10;
    if (home > 6)
    {
        expectedDonations += donationList[i].getDonation();
        cout << "The " << donationList[i].getName() << " are not home and
            have been deffered." << endl;
    }
    else
    {
        expectedDonations += donationList[i].getDonation();
        totalDonations += donationList[i].getDonation();
        cout << "The " << donationList[i].getName() << " have donated $" <<
            donationList[i].getDonation() << "." << endl;
    }
}
cout << "The expected total donation today was: $" << expectedDonations <<
    endl;
cout << "The actual total donation today was: $" << totalDonations << endl;
return 0;
}
/*
The Nelsons are not home and have been deffered.
The Hills have donated $3.
The Kings have donated $68.
The Martins have donated $4.
The Moores have donated $5.
The Wilsons have donated $4.
The Davis have donated $98.
The Browns are not home and have been deffered.
The Williams have donated $5.
The Johnsons have donated $5.
The Smiths are not home and have been deffered.
The Jones have donated $5.
The expected total donation today was: $208
The actual total donation today was: $197
*/

```