#include <iostream>

using namespace std;

int main()

{

double balance = 50.00;

int count = 0;

cout << "This program tells you how long it takes\n";

<< "to accumulate a debt of $100, starting with\n";

<< "an initial balance of $50 owed.\n";

<< "The interest rate is 2% per month.\n";

while (balance < 100.00)

{

balance = balance + 0.02 \* balance;

count++;

}

cout << "After " << count << " months, \n";

cout.setf(ios::fixed);

cout.setf(ios::showpoint);

cout.precision(2);

cout << "your balance due will be $" << balance << endl;

return 0;

}