

## Problem 2

1 point possible (ungraded)

Now write a program that calculates the minimum **fixed** monthly payment needed in order pay off a credit card balance within 12 months. By a fixed monthly payment, we mean a single number which does not change each month, but instead is a constant amount that will be paid each month.

In this problem, we will *not* be dealing with a minimum monthly payment rate.

The following variables contain values as described below:

- 1. `balance` - the outstanding balance on the credit card
- 2. `annualInterestRate` - annual interest rate as a decimal

The program should print out one line: the lowest monthly payment that will pay off all debt in under 1 year, for example:

Lowest Payment: 180

Assume that the interest is compounded monthly according to the balance at the end of the month (after the payment for that month is made). The monthly payment must be a multiple of \$10 and is the same for all months. Notice that it is possible for the balance to become negative using this payment scheme, which is okay. A summary of the required math is found below:

**Monthly interest rate** = (Annual interest rate) / 12.0  
**Monthly unpaid balance** = (Previous balance) - (Minimum fixed monthly payment)  
**Updated balance each month** = (Monthly unpaid balance) + (Monthly interest rate x Monthly unpaid balance)

**Test Cases to Test Your Code With.** Be sure to test these on your own machine - and that you get the same output! - before running your code on this webpage!

[Click to See Problem 2 Test Cases](#)

1 # Paste your code into this box

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Press ESC then TAB or click outside of the code editor to exit

Unanswered

### Hints

[Hint: How to think about this problem?](#)

[Hint: A way of structuring your code](#)

**Reminder:** Only hit "Check" once per submission. We are unable to give you more than 30 checks.

 Hide Notes