Assignment-1 - Paying Debt off in a Year

**Paying Debt off in a Year:** # Write a program to calculate the credit card balance after one year if a person only pays the minimum monthly payment required by the credit card company each month.

The following variables contain values as described below:

* **balance** - the outstanding balance on the credit card
* **annualInterestRate** - annual interest rate as a decimal
* **monthlyPaymentRate** - minimum monthly payment rate as a decimal

# For each month, calculate statements on the monthly payment and remaining balance. At the end of 12 months, print out the remaining

# balance. Be sure to print out no more than two decimal digits of accuracy - so print

# **Remaining balance:** 813.41

# instead of

# **Remaining balance**: 813.4141998135

# So your program only prints out one thing: the remaining balance at the end of the year in the format:

# **Remaining balance:** 4784.0

A summary of the required math is found below:

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

**Input Format:**

* The first line of the input contains the string, which has three numbers separated by space.

**Output Format:**

* Return the value of Remaining balance.

**Sample Input #1:**

42 0.2 0.04

**Sample Output #1:**

Remaining balance: 31.38

**Sample Input #2:**

484 0.2 0.04

**Sample Output #2:**

Remaining balance**:** 361.61