PROBLEM 1: PAYING THE MINIMUM (10 points possible)

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:

1. `balance` - the outstanding balance on the credit card

2. `annualInterestRate` - annual interest rate as a decimal

3. `monthlyPaymentRate` - minimum monthly payment rate as a decimal

For each month, calculate statements on the monthly payment and remaining balance, and print to screen something of the format:

```
Month: 1
Minimum monthly payment: 96.0
Remaining balance: 4784.0
```

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
```

Finally, print out the total amount paid that year and the remaining balance at the end of the year in the format:

```
Total paid: 96.0
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)