CS121

Spring 2019

Lab 3

The **monthly payment** on an installment loan may be calculated using the following formula:



where: R is the annual interest rate divided by 12 (expressed as a decimal),

N is the **total** number of payments over the life of the loan

L is the loan amount

Your program will:

1. Ask the user for their name, the amount of the loan, the **annual** interest rate, and the number of **years** of the loan.
2. Calculate the monthly payment, total amount paid, and interest amount
   1. You will have to use the pre-defined function *pow* (see page 131)
3. Output the results in the following format: (using **your** values, this is an EXAMPLE)

|  |  |  |
| --- | --- | --- |
| Name: |  | MacKay |
| Loan Amount: | $ | 10000.00 |
| Monthly Interest Rate: |  | 1% |
| Number of Payments: |  | 36 |
| Monthly Payment: | $ | 332.14 |
| Total Amount Paid: | $ | 11957.15 |
| Interest Amount: | $ | 1957.15 |