Programming Assignment 1

Suppose that you are buying a car for $45,575.25, including taxes and license fees. The dealer is offering you two incentives:

Incentive A is $6000 off the price of the car, followed by a five-year loan at 2.675%.

Incentive B does not have a cash rebate, but provides free financing over five years.

Write a program to calculate the monthly payment and Interest for Incentive A and for Incentive B. Additionally, compute the amount of money saved over five years. Declare annual rate of interest and compounding criteria as constants.

$$PMT = PV \left\{ \frac{i}{1 - (1 + i)^{-n}} \right\}$$

where PV is the present value (loan amount), PMT is the payment, $i = \frac{r}{m}$ (r is the annual rate of interest and m is the compounding criteria), and $n = mt$ (t is the time for the loan).

$$I = PMT * n - PV$$

where I is the interest paid.