

6.4 The monthly payment for a bank loan depends on the amount of the loan, the duration of loan and the interest rate.

If P denotes the amount of the loan, N denotes the duration of loan in months and r denotes the annual interest rate in percent. Then the monthly payment can be calculated by the following formula

$$\text{Monthly Payment} = \frac{R * (1 + R)^N * P}{(1 + R)^N - 1}$$

$$\text{where } R = \frac{1}{12} \left(\frac{r}{100} \right)$$

Write a function *Payment* (with three parameters: Amount, Month, Rate) to find the monthly payment and total payment.

$$\text{Total payment} = \text{Monthly Payment} * \text{duration}$$

Write a program to test your function.

Hint : Make use of the function *Power* in Problem 6.3.

Sample running :