TUAN MUHAMMAD HASIF BIN TUAN ZAKI
A24CS0205
SCSE1013 - SECTION 02
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Start

Read loan amount (P),
annual interest rate (r),
loan period in years (n) and
user's monthly income.

Calculate monthly repayment (M),
$M = ((P*r)/12) / [1-((1+r)/12)^{(-12*n)}]$

Print monthly repayment (M)

Calculate the affordabableness of the
monthly payment (A),
$A = M/$ user monthly income*100%

Check if A > 30%

True

Print "Warning:
Payment may
not be affordable."

False

Do you want to
continue the
loan process

True

Do you want to
proceed with the
loan repayment

False

Print "Loan Default: Extend
Loan Period or Adjust
Payment Plan."

False

True

A

Print "Proceed
with loan repayment"

A

False

Check if loan is fully repaid

True

Print "Loan
Repayment
Successful."

End

Sample inputs and output.

1. Affordable payment

Loan amount, P	Annual interest year, r	Loan period in years, n	User's monthly income	Monthly repayment, M	Affordableness of the monthly payment, A	Affordable or not	Continue or terminate	OUTPUT
10,000	5%	3	2,000	299.71	14.99%	Affordable	Continue	Loan Repayment Successful

2. Not affordable payment.

Loan amount, P	Annual interest year, r	Loan period in years, n	User's monthly income	Monthly repayment, M	Affordableness of the monthly payment, A	Affordable or not	Continue or terminate	OUTPUT
30,000	15%	3	1,500	713.70	47.60%	Not affordable	Continue	Loan Repayment Successful