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Program Design

Problem Description

Design and Implement an console based application that will calculate the compound interest amount for a single time using the following formula :

A= p(1+ r)

Input and Output

Input

Inputs	
Input Description	**Mechanism**
Price – Double value	Standard Input Stream
Rate – Double Value	Standard Input Stream
Outputs	
Price – Double value	Standard Output Stream
Rate – Double Value	Standard Output Stream
Amount -Double value	Standard Output Stream

Data Format

Indentifier	**Data Type**	**Description**
dblePrice	Double	Price variable
dblRate	Double	Rate Variable
dbleAmount	Double	Amount Variable

Pseudo Code

On Input program init :

DblePrice ← Input price

dbleRate ← Input Rate

Output : ApplyInterest Program

Output : ApplyInterest Program

On ApplyInterest Program init :

dblPrice ← Input price from input Program

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dblRate ← Input Rate from input Program

dblAmount ← dblPrice * (1 + dblRate)

Output : dblPrice

Output : program

On Output Program init :

dblAmount ← Input Amount from ApplyInterest program

Output : " The Final Amount :" dblAmount

UML Activity Diagram