Problem One  
The XYZ Corporation's marketing department recently conducted a survey and found that their online advertising campaign resulted in a conversion rate of 0.8%. They are now planning a new campaign and want to estimate the potential number of conversions based on their target audience size. Write a program that will estimate the number of conversions for a target audience size of 3M.

Restated

Write a program that will estimate the number of conversions for a target audience size given a specific conversion rate.

General Model

Input (conversion rate, audience size) -> conversion calculation ->output (estimate number of conversions)

conversion rate calculation -> rate \* size

Detailed Steps  
//declare the program storage

DECLARE conversionRate as Float

DECLARE audienceSize as Integer

DELCARE numberOfConversions as Float

//input

PROMPT: Enter the conversion rate:

SET conversionRate (read)

PROMPT: Enter the audience size: (read audienceSize)

//process

CALCULATE numberOfConversions = conversionRate \* audienceSize

//output

PRINT the numberOfConversions (round to nears whole number)

Problem Two  
The HR department of a manufacturing company wants to determine the cost savings achieved by  
implementing a new automated inventory system. They estimate that the new system will reduce  
inventory management costs by 15%. Develop a program that will calculate the amount of cost savings achieved by implementing the automated inventory system, aiding the HR department in evaluating the potential benefits of the new system.

Restated  
Develop a program that will calculate the amount of cost savings achieved on the inventory management costs given a specific savings percentage.

General Model

Inputs (percentage Savings, cost of inventory) -> calculate cost savings ->outputs (cost savings)

Formula: cost savings = cost of inventory \* (percent savings / 100)

Detailed Steps

//declare program storage

DECLARE costOfInventory as Float

DELCARE percentageSavings as Integer

DELCARE costSavings as Float

//inputs

PROMPT: Enter the cost of inventory(read)

PROMPT: Enter the savings percentage: (read)

//processing

CALCULATE cost savings = cost of inventory \* (percent savings / 100)

//output

PRINT Cost savings