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

Conversion calculation -> audience size \* conversion rate

Detailed Steps

//declare storage

DECLARE audienceSize as Integer

DECLARE conversionRate as Float

DECLARE numberOfConversions

//input

PROMPT: Enter the audience size: (read)

PROMPT: Enter the conversion rate: (read)

//process

CALCUATE: numberOfConversions = audienceSize \* conversionRate

//output

PRINT the numberOfConversions (round to nearest 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

General Model

Detailed Steps