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Begin BankingApplication

Define Banking class with properties:

- initialInvestment

- monthlyDeposit

- annualInterest

- numberOfYears

Define methods for Banking class:

- SetInitialInvestment(amount)

- SetMonthlyDeposit(amount)

- SetInterestRate(rate)

- SetNumberOfYears(years)

- CalcBalanceWithoutMonthlyDeposit()

- CalcBalanceWithMonthlyDeposit()

- DisplayInvestmentDetails()

Initialize Banking object myInvestment

Main Program

Loop until user inputs 'q'

ClearScreen()

PrintHomeScreen()

Prompt user for initialInvestment

Prompt user for monthlyDeposit

Prompt user for annualInterest

Prompt user for numberOfYears

Validate and set the properties of myInvestment object

End PrintHomeScreen

myInvestment.DisplayInvestmentDetails()

Call CalcBalanceWithoutMonthlyDeposit()

Calculate and display year-end balances without monthly deposits

Call CalcBalanceWithMonthlyDeposit()

Calculate and display year-end balances with monthly deposits

End DisplayInvestmentDetails

Prompt user to enter 'q' to quit or any other key to run another report

End Loop

End Main Program

Function ClearScreen()

Clear the console screen for readability

End Function

Function PrintHomeScreen()

Display user prompts for investment details and call respective setters of myInvestment

End Function

Function CalcBalanceWithoutMonthlyDeposit()

For each year, calculate interest, add it to totalAmount, and display the result

End Function

Function CalcBalanceWithMonthlyDeposit()

For each year and each month, calculate monthly interest, add it to totalAmount along with monthlyDeposit, and display the result

End Function

Function DisplayInvestmentDetails()

Call CalcBalanceWithoutMonthlyDeposit() and CalcBalanceWithMonthlyDeposit() to display investment details

End Function

Function validIntInput()

Repeat until a valid integer is input

Prompt user and validate input

Return valid integer

End Function

Function validDoubleInput()

Repeat until a valid double is input

Prompt user and validate input

Return valid double

End Function

End BankingApplication