/\* Nicholas Carroll 26 November 2018

\* LAB4 - Write a method that computes future investment value at a given interest rate for a specified number of years

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**package** financialApplication;

**import** java.util.Scanner;

**import** java.lang.Math;

**public** **class** VariableDeclaration {

**public** **static** **void** main(String[] args) {

Scanner enter = **new** Scanner(System.***in***);

**int** yearlyInterestRate = 0;

**int** investmentAmount = 0;

**double** monthlyInterestRate = 0;

**double** futureInvestmentEquation = 0;

*futureInvestmentValue*(yearlyInterestRate, investmentAmount, monthlyInterestRate, futureInvestmentAmount, enter); // declaring arguments

} // end of main program

**public** **static** **int** futureInvestmentValue(**int** yearlyInterestRate, **int** investmentAmount, **double** monthlyInterestRate, **double** futureInvestmentAmount, Scanner enter) { // creating for loop and declaring parameters

**for**(**int** years = 1; years <= 30; years++) {

System.***out***.println("Enter annual interest rate:");

yearlyInterestRate = enter.nextInt() / 100; // converting percentages to decimals

monthlyInterestRate = yearlyInterestRate / 12;

System.***out***.println("Enter the investment amount in integer form with no commas or decimals:");

investmentAmount = enter.nextInt();

System.***out***.println("Enter the amount of years:");

years = enter.nextInt();

futureInvestmentEquation = (investmentAmount \* Math.*pow*(1 + monthlyInterestRate, years \* 12));

System.***out***.format("%-18s%-18s", "Years", "Future Value");

System.***out***.format("%-18s%-18s", years, futureInvestmentEquation);

} // end of for loop

**return** 0;

} // end of futureInvestmentValue program

} // end of class