Exercise 7: Financial Forecasting

Code:

**import** java.util.Scanner;

**public** **class** Forecast {

**public** **static** **double** forecastValue(**double** currentValue, **double** growthRate, **int** years) {

**if** (years == 0) {

**return** currentValue;

}

**return** *forecastValue*(currentValue \* (1 + growthRate), growthRate, years - 1);

}

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

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

System.***out***.print("Enter initial amount: ");

**double** initialValue = scanner.nextDouble();

System.***out***.print("Enter annual growth rate (e.g., 0.08 for 8%): ");

**double** growthRate = scanner.nextDouble();

System.***out***.print("Enter number of years: ");

**int** years = scanner.nextInt();

**double** futureValue = *forecastValue*(initialValue, growthRate, years);

System.***out***.printf("Future value after %d years: %.2f%n", years, futureValue);

scanner.close();

}

}

Output:  
  
A close-up of numbers

AI-generated content may be incorrect.