**Exercise 7: Financial Forecasting**

**Scenario:**

You are developing a financial forecasting tool that predicts future values based on past data.

**THEORY:**

The code takes Base amount, rate of interest and term then calculates the final amount using recursion.

**CODE:**

import java.util.Scanner;

public class financeForecast {

    public static void main(String[] args) {

        Scanner scan = new Scanner(System.in);

        System.out.println("Enter principal amount");

        float amt = scan.nextInt();

        System.out.println("Enter rate of interest in %");

        int r = scan.nextInt();

        System.out.println("Enter term");

        int n = scan.nextInt();

        scan.close();

        float ans = finalAmt(amt,r,n);

        System.out.printf("Future value after %d years is: %.2f\n", n, ans);

    }

    static float finalAmt(float amt,int r,int n){

        if(n==0){

            return amt;

        }

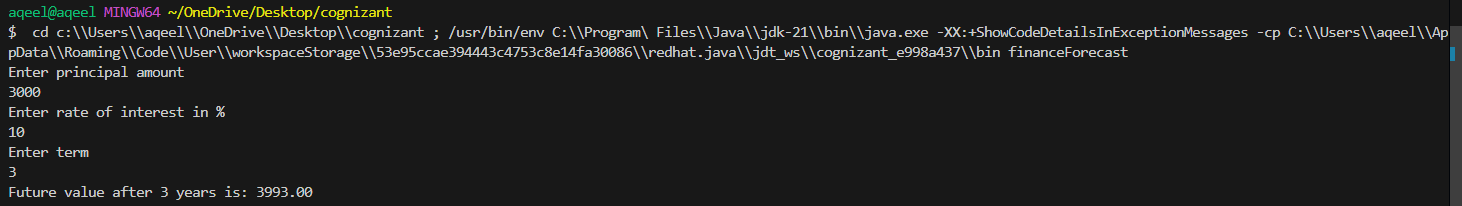
        amt = amt \* (1 + (float)r/100);

        return finalAmt(amt, r, n-1);

    }

}

**OUTPUT:**

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