

## Exercise 7: Financial Forecasting

### FinancialForecasting.java:

```
public class FinancialForecast{

    public static double calculateFutureValue(double presentValue,double rate,int years){

        if (years==0){

            return presentValue;

        }

        return calculateFutureValue(presentValue,rate,years-1)*(1+rate);

    }

    public static void main(String[] args){

        double initialInvestment=10000;

        double growthRate=0.08;

        int totalYears=5;

        double result=calculateFutureValue(initialInvestment, growthRate,totalYears);

        System.out.printf("Future Value after %d years: Rs.%.2f\n",totalYears,result);

    }

}
```

### Output:

```
[Running] cd "/Users/yagnanarayanan/Library/Mobile Documents/com~apple~TextEdit/Documents/week1-cog/week1/Algorithms_Data Structures/FinancialForecasting/"
" && javac FinancialForecast.java && java FinancialForecast
Future Value after 5 years: Rs.14693.28

[Done] exited with code=0 in 0.717 seconds
```