# **Compound Interest**

3<sup>rd</sup> October 2017

#### **Problem Statement**

If you invest P dollars at R percent interest rate compounded annually, in N years your investment will grow to  $P(1 + R/100)^N$  dollars.

Compute the amount of money earned after N years.

### Plan - By task

- 1. Collect user input for P, R and N.
- 2. Apply the user input to the equation and compute earned monies.
- 3. Display the result in a readable way

#### **Class Descriptions**

Class: Purpose:

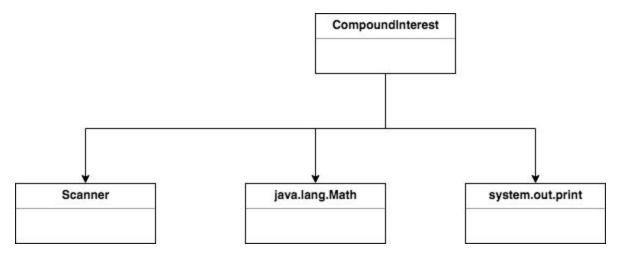
CompoundInterest Main class of program

Scanner Collection of user input.

java.lang.Math Calculation of user input to a meaningful result

System.out.print Output the result to terminal

## **Program Diagram**



## **Assumptions**

- 1. Interest is entered in a more human readable percentage point
- 2. User input is already sanitized