Compounded Interest Algorithm

Objective:

Using data given by X bank, create an algorithm that will calculate the amount of money that will be accrued by the student.

Complexity level:

* Easy-Medium

Business Scenario:

* John Doe is a fiscally competent citizen.
* He wants to streamline a way to calculate how much money he will earn in X years based solely off of interest.

Data set:

(Balance numbers are in US Dollars)



Problem Statement:

1. Write an algorithm to find the Ending balance in the year of 7 on the above data.
2. Write an algorithm to find the Ending balance in the year of 15 on the above data.

Expectation Outcome:

Practice unit conversion, user input, and create a useful tool that can be applicable to everyday life.

Tools:

* Open office for designing the flow chart.

Reference URL:

1. [http://laws.justice.gc.ca/en/showdoc/cs/I-15/bo-ga:s\_6//en#anchorbo-ga:s\_6](http://laws.justice.gc.ca/en/showdoc/cs/I-15/bo-ga:s_6/en#anchorbo-ga:s_6) Interest Act (Canada), Department of Justice. The Interest Act specifies that interest is not recoverable unless the mortgage loan contains a statement showing the rate of interest chargeable, "calculated yearly or half-yearly, not in advance." In practice, banks use the half-yearly rate.
2. Munshi, Jamal. ["A New Discounting Model"](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2417143). ssrn.com.
3. This article incorporates text from a publication now in the [public domain](https://en.wikipedia.org/wiki/Public_domain): [Chambers, Ephraim](https://en.wikipedia.org/wiki/Ephraim_Chambers), ed.(1728). "Article name needed". [Cyclopædia, or an Universal Dictionary of Arts and Sciences](https://en.wikipedia.org/wiki/Cyclop%C3%A6dia,_or_an_Universal_Dictionary_of_Arts_and_Sciences) (first ed.). James and John Knapton, et al.