|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **LEARNING PROFILE FOR ASSIGNMENT#\_1\_\_\_\_\_ AND QUESTION#\_5\_\_\_\_\_\_\_** | | | | | |
| *Name* | *:* | *Steven Morrissey* | *Due Date* | *:* |  |
| *Student ID* | *:* | *3300222* | *Submission Date* | *:* |  |

**1. Problem Statement:**

Solve the following problem using a program: Suppose you save $100 each month into a savings account with an annual interest rate of 5%. Thus, the monthly interest rate is 0.05/12 = 0.00417. After the first month, the value in the account becomes 100 \* (1 + 0.00417) = 100.417 After the second month, the value in the account becomes (100 + 100.417) \* (1 + 0.00417) = 201.252 And after the third month, the value in the account becomes (100 + 201.252) \* (1 + 0.00417) = 302.507 … and so on. Write a program that randomly generates monthly savings amounts for the 15 runners in Problem 4. Each monthly saving should be in the range of $100 to $800. Extend the AddressBook class to store the monthly savings generated by the random number generator. Then, display the final account value for each of the 15 runners.

**2. Description of the Code:**

Calculates interest and generated savings separately and saves them into their respective fields. getReport gets the account value and creates a string for each EmployeeSavings object to be printed out

**3. Errors and Warnings:**

Table 1: List of Errors and Warnings Encountered in the Program

|  |  |  |  |
| --- | --- | --- | --- |
| **#** | **Errors / Warnings** | **Details** | **How I solved them** |
| 1 | none |  |  |
| 2 |  |  |  |
| 3 |  |  |  |
| 4 |  |  |  |
| 5 |  |  |  |

**4. Sample Input and Output:**

**Case 1: Given an Array EmployeeSavings with generated savings and interests, when a report is printed out for that Array, then all the account values are displayed to the user.**

**5. Discussion:**

**None, it was straight forward**