

# Java Basics

# **Training Assignments**

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## **RECORD OF CHANGES**

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1	01/Oct/2018	Create new	Draft	DieuNT1	VinhNV
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# **Contents**

כ	ay 1. Assignment 1: Basics OOP	4
	Objective:	
	Assignment Specifications:	
	Problem Descriptions:	
	Guidelines:	2



CODE: JAVA.M.A101

TYPE: SHORT

LOC: 70

DURATION: 30 MINUTES

## Day 1. Assignment 1: Basics OOP

#### **Objective:**

» Understand basic concept about OOP

### **Assignment Specifications:**

Create class **SavingsAccount**, your class must have the following features:

#### Instance variables:

- » annualInterestRate to store the annual interest rate for all account holders.
- » savingsBalance indicating the amount the saver currently has ondeposit.

#### Constructor:

- » public SavingsAccount(): A default constructor, it should initialize the attributes to 0, 0)
- » public public SavingsAccount(double intRate, double savBal): A constructor with parameters, it creates the SavingsAccount object by setting the two fields to the passed values.

#### Instance methods:

- » Getter/Setter Methods: are used to get/set the value.
- » Provide method calculateMonthlyInterest to calculate the monthly interest by multiplying the savingsBalance by annualInterestRate divided by 12 this interest should be added to savingsBalance.

Write a program to test class **SavingsAccount**. Instantiate two **savingsAccount** objects, saver1 and saver2, with balances of \$2000.00 and \$3000.00, respectively. Set annualInterestRate to 4%, then calculate the monthly interest and print the new balances for both savers.

Then set the annualInterestRate to 5%, calculate the next month's interest and print the new balances for both savers.

#### **Problem Descriptions:**

» Write a java console program to resolve this assignment

#### **Guidelines:**

- » Create a project named Java.M.A101, create package fa.training.entities that contains SavingsAccount class.
- » Create a new package named fa.training.main contains SavingsAccountTest class.