

PHP Exercise Q2 Answered

Create an Employee class that includes three pieces of information as data members:

- first name
- last name
- monthly salary

The class should have a constructor that initializes the three data members. Write setters and getters for each of the data members. If the monthly salary is not positive, set it to 0.

- Create a set of test data and then write a program to test the class.
- Write some code to give each employee a 10% pay raise.
 - Create a set of test data and then write code to test the pay raise.

```
<?php
class Employee
{
    private $firstName = "";
    private $lastName = "";
    private $monthlySalary = 0;

    public function __construct($firstName, $lastName, $monthlySalary){
        $this->setFirstName($firstName);
        $this->setLastName($lastName);
        $this->setMonthlySalary($monthlySalary);
    }

    public function setFirstName($firstName){
        $this->firstName = $firstName;
    }

    public function getFirstName(){
        return $this->firstName;
    }

    public function setLastName($lastName){
        $this->lastName = $lastName;
    }

    public function getLastName(){
        return $this->lastName;
    }

    public function setMonthlySalary($monthlySalary){
        if($monthlySalary >= 0){
            $this->monthlySalary = $monthlySalary;
        }
    }

    public function getMonthlySalary(){
        return $this->monthlySalary;
    }
}
```

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Comment	Input Data	Expected Result	Status	Date
Negative Monthly Salary	first name = "Jane" last name = "Doe" monthly salary = -1	getFirstName() = "Jane" getLastName() = "Doe" getMonthlySalary() = 0	PASSED	9/5/2014
Zero Monthly Salary	first name = "John" last name = "Do" monthly salary = 0	getFirstName() = "John" getLastName() = "Do" getMonthlySalary() = 0	PASSED	9/5/2014
Positive Monthly Salary (floating point)	first name = "Kofi" last name = "MDogo" monthly salary = 1.15	getFirstName() = "Kofi" getLastName() = "MDogo" getMonthlySalary() = 1.15	PASSED	9/15/2014

```
<? require 'Employee.php' ?>
<!DOCTYPE html>
<html>

<head>
  <meta charset="utf-8" />
  <title>Employee Tester</title>
</head>

<body>
  <?php
    function fequal($n1, $n2, $epsilon){
      return abs($n1 - $n2) < $epsilon;
    }

    // Turn on assertions
    assert_options(ASSERT_ACTIVE, true);
    // Failed assertions should terminate
    assert_options(ASSERT_BAIL, true);
    echo '</br>Negative Monthly Salary';
    $emp = new Employee( "Jane", "Doe", -1);
    assert($emp->getFirstName() === "Jane" && $emp->getLastName() === "Doe" && $emp->getMonthlySalary() ===
0);
    echo '</br>Passed</br>';

    echo '</br>Zero Monthly Salary';
    $emp = new Employee("John", "Do", 0);
    assert($emp->getFirstName() === "John" && $emp->getLastName() === "Do" && $emp->getMonthlySalary() ===
0);
    echo '</br>Passed</br>';

    echo '</br>Positive Monthly Salary (floating point)';
    $emp = new Employee("Kofi", "MDogo", 1.15);
    assert($emp->getFirstName() === "Kofi" && $emp->getLastName() === "MDogo" && fequal($emp-
>getMonthlySalary(), 1.15, .001));
    echo '</br>Passed</br>';

    echo '</br>All tests passed' ?>
  </body>
</html>
```

Negative Monthly Salary
Passed

Zero Monthly Salary
Passed

Positive Monthly Salary (floating point)
Passed

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All tests passed

Comment	Input Data	Expected Result	Status	Date
Give two employees a 10% pay raise	Monthly salary 1 = 10 Monthly salary 2 = 100	getMonthlySalary() = 11 getMonthlySalary() = 110	PASSED	9/5/2014

```
echo '</br>Give two employees a 10% pay raise';  
$emp1 = new Employee("Jane", "Doe", 10);  
$emp2 = new Employee("Kofi", "MDogo", 100);  
$emp1->setMonthlySalary($emp1->getMonthlySalary() * 1.1);  
$emp2->setMonthlySalary($emp2->getMonthlySalary() * 1.1);  
assert(fequal($emp1->getMonthlySalary(), 11, .001) && fequal($emp2->getMonthlySalary(), 110, .001));  
echo '</br>Passed</br>';
```